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ABSTRACT

In the first section four articles illustrate the basic concepts of the role of the library in college instruction. The library-college movement is discussed; Swarthmore College's "Teaching Library" in particular is examined. The second section contains four articles about actively established programs in library instruction. Following this the American Library Association's activities in library instruction are outlined with a bibliography on the academic library field. The final section deals with research and experimentation. Its six articles review the research on instruction in the use of academic libraries, outline the Council Library Resources grant program to academic libraries for innovative programs of instruction, and report on some of these Council sponsored projects such as those at Eastern Michigan University and Hampshire College and in the Wabash Project. One of the editors presents a program for action as the conclusion. (WH)

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INTEGRATING LIBRARY INSTRUCTION IN THE COLLEGE CURRICULUM

PATRICIA A. HENNING & MARY E. STILLMAN
issue editors

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INTEGRATING LIBRARY INSTRUCTION IN THE COLLEGE CURRICULUM

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Introduction

This issue originated from two very specific needs–the need of one editor for guidance in establishing a program of library instruction for Drexel students; and the need of the other for published literature to guide the independent study of graduate students in library science. The need for more effective instruction in the use of library resources also emerged from research for an earlier issue on user needs. Although research on user needs has concentrated on criteria for designing optimum systems, it is evident from this research (at least, to the professional librarian) that very few users indeed understand or use effectively resources now available. Meanwhile, until optimum systems are designed and implemented, resplendent in their sophistication and technology, much can be done to effect better use of current resources. Even when such systems become available, it is unlikely that they will be retrospective–thus the scholar and researcher will still need to negotiate with our present resources.

Although there is a substantial body of literature on library instruction in academic libraries, in general, it tends to be superficial, repetitive, and unimaginative; the literature does not reflect accurately the activity, vigor, and widespread interest of the profession. There is an obvious need for a comprehensive state-of-the art review which portrays the contemporary library instruction movement emerging in American college and university libraries and the concern of the profession; we hope this issue does so.

The issue is divided into five sections: "Basic Concepts of the Role of the Library in College Instruction"; "Active Established Programs"; "Professional Activities and Literature"; "Research and Experimentation"; and "Program for Action."

Although, in many respects, we may have fallen short of our original goal–studying integration of library instruction in the college curriculum–we have retained this title because it is and must be the long-range goal. Our readers must remember that this is a vital, flexible movement, characterized by innovation and experimentation, very much in a state of flux; they should not assume that it will long remain as we portray it.

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We wish to express our most sincere appreciation to the many librarians who have continually encouraged us by their suggestions, contributions, and active support and interest.

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basic concepts of the role of the library in college instruction

Although there is a general consensus that a library is necessary for college instruction, there is no agreement among librarians, faculty, and administrators, or within any one of these groups, as to exactly what the library role should be. At one extreme, we have the Library-Collegians who feel that instruction should revolve around or evolve from the library; at the other extreme we have those who consider the library a resource, roughly equated with classrooms, tolerated at the insistence of accrediting associations. There is also diversity of opinion concerning who is responsible for providing instruction in the use of the library and in what manner this should be done. We have assembled in this section a series of articles presenting a wide range of theories and practices. Fay Blake assesses the Library-College movement and suggests changes in its philosophical concepts; Joan Bechtel examines the same movement for practical implications; John Williamson recounts the effort of Swarthmore College to evolve a teaching library as part of overall educational improvement, and interprets its features and problems from the dual viewpoint of both faculty and librarian; and Patricia Knapp provides her observations and principles concerning the implementation of library instruction programs based on the contemporary college scene.—Ed.

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the library-college movement

by Fay M. Blake

The idea of the Library-College was born early in the 1930's and had one of its earliest public introductions at the American Library Association conference in Chicago in 1934, when Dr. Louis Shores presented his paper on the "Library-Arts College." In 1940, the dormant notion of a library-centered college received an apparently much needed transfusion with the publication of Harvie Branscomb's Carnegie-sponsored study, *Teaching with Books*. Dr. Shores tells us that depression, war and post-war dislocations prevented much real development of the library-college movement. During the sixties, however, when the nation experienced general educational ferment as Sputnik jolted us out of complacency, the Library-College became not just a Utopian concept but the inspiration for experiments here and there.

THE ATTRIBUTES OF THE LIBRARY-COLLEGE

Before examining the progress of the idea, it might be wise to explain what the Library-College is intended to be, since it is clear that many librarians or educators know little about it. E.J. Josey, for example, polled Negro colleges in 1968 for his article in the first issue of the *Library-College Journal* and found that most of those he questioned had never heard of the Library-College. At the 1969 Interdisciplinary Symposium on the Library-College in Chicago, there was much muttering among the participants about the failure to explain the elements of the Library-College, a situation which seems to indicate that some clarification is still necessary. The Library-College, as Dr. Shores and other proponents envision it, consists of several components, all essential.

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Learning mode

The Library-College is based on the concept of independent study – each individual student learning primarily by reading. He would be doing his reading in his own assigned library carrel. By 1970, the learning mode originally conceived as the rather loosely defined "independent study," had developed two additional elements (described in Dr. Shores' "A Library-College Decalogue" in *Catholic Library World*). Not only would each student study independently but each one would teach one – upper classmen would be guiding and tutoring lower classmen – and learning would not only come from reading but from work-study programs. Each Library-College would develop cooperative contracts with local private industry, government agencies and private foundations and agencies.

Library

The Library-College library must recognize that the printed book is no longer (if it ever was) the only learning tool. The new kind of college library would be required to select, acquire and make available the "generic book," or study material in any of its myriad forms: printed books, tapes, films, cassettes, records, and every auditory and visual kind of study aid conceivable and available. Each student carrel would need to be as dripping "wet" as money and imagination could make it, equipped with dial access panels and technological adaptations of all known communications media.

Faculty

The faculty of the Library-College needs to be "bibliographically sophisticated" since one of its main functions would be to guide the student into the resources of the library. Librarians, *ipso facto*, become faculty since they are probably the most sophisticated of anyone on campus on the library's capabilities. Heavily supported by library technicians, who take over the housekeeping aspects of the library, the librarians may even become teachers of the teachers in a Library-College, helping instructional faculty to greater bibliographical sophistication. In any case, librarians and instructional faculty work closely together to devise the curriculum and to guide the student in his independent study. Lately, Dr. Shores, doyen of the Library-College movement, has added another dimension to his requirements for faculty. He insists that the faculty must know each student individually and love him with a Christ-like love.

Curriculum

The Library-College curriculum is nowhere spelled out in detail. Beyond reminders that it must be broad, interdisciplinary and flexible, the literature on the Library-College movement shies away from specifics. Dr. Shores states that the curriculum should provide an "interdisciplinary overview of what appears to be most significant to man," and that this overview would be arrived at from a combination of faculty syllabi and student profiles. This appears to mean that faculty members would decide what they considered significant, then would tailor their syllabi according to the particular interests indicated by each student. Librarians, of course, as members of the faculty, would participate fully in curriculum planning, but it is not clear just how they would adjust their syllabi to individual student interests.

Facility

The centrally-located and centrally-important library, equipped to handle all media, becomes the heart of the Library-College. The Library-College concept implies radically new organization and responsibilities for the college library. It becomes not a repository for books but a learning resources center for the "generic book." It provides seating not for a *portion* of the student body at *one time* but for the *entire* student body *all the time.* It does not merely collect materials to support the curriculum but actively initiates changes in the curriculum. It is physically planned as the center of the campus with classrooms, offices, laboratories and other facilities grouped around it.

Organization

Originally the Library-College was conceived as serving no more than five hundred students. When more than five hundred students enroll, the college would form a new unit, and all participating units on a campus would form a group of cluster colleges, each autonomous with its own library facilities but having access to the overall resources of the institution. Recently the Library-College has revised its figures upward. A Library-College could serve from five hundred to one thousand students, so in some of the monstrous multiversities of today as many as fifty cluster colleges would be necessary and feasible.

That's the Library-College idea. The purpose of the Library-College is stated in the Jamestown Charter of 1965 as: "... to increase the

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effectiveness of student learning, particularly through (but not limited to) the use of library-centered independent study, with a bibliographically expert faculty."[1]

EXPERIMENTS WITH THE LIBRARY-COLLEGE CONCEPT

By November 1970, it is claimed, "... over 300 colleges and universities have now reported to 'In-Nova' [a column in the *Library-College Journal*] experiments and innovations along the Library-College way."[2] The Library-College proponents point to a number of examples of college organization inspired by the Library-College idea. One of the earliest experiments began in the early thirties at Stephens College in Columbia, Missouri, with the appointment of B. Lamar Johnson as Dean of Instruction. Dr. Johnson, serving as both dean of instruction and librarian in this four-year liberal arts college for women, quickly adopted the idea of the generic book for the college library and began to encourage instructors to bring their classes to the library where students could work independently on assignments with help from librarians and faculty in finding materials. By 1937, he had developed plans for a radically new library building in which the library itself would be the instructional locale. The building he planned was never constructed, but Stephens College today has, in addition to its library, extensive language and science laboratories, art studios, and audiovisual facilities. There is both a Director of the Library and a Director of Instructional Services (whose domain is the nonbook media). The concept of the generic book has been much diluted, and apparently the Library-College concept has gone down the drain. A recent reporter indicates that book and nonbook (a term which is anathema to Library-College missionaries) collections develop independently of each other and that there exists no single catalog of tapes and other nonbook media.[3]

Beginning in 1960, under the guidance of Patricia Knapp, an extensive program began at Monteith College in Detroit's Wayne State University. Library and teaching staff planned close cooperation to create an "integrated" learning environment. The main thrust of the program was towards independent study and, consequently, change in how and how much the student used the university's library resources. The Knapp experiment has been extensively reported,[4] and, of all the examples cited as incipient Library-Colleges, this one probably incorporates most of the fiats in the initial concept. Independent study was

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stressed but not the "each one teach one" or the work-study principles; the generic book was not a central part of the Monteith College experiment nor was the heavy use of technology and audiovisual materials; librarians participated very actively in the plan but did not become faculty by either Library-College or traditional standards; the curriculum was not initiated by librarians nor by faculty-student cooperation; and the Monteith College library did not become the central facility envisaged by Library-Collegians.

In 1965, Oklahoma Christian College began with the concept of encouraging independent study via the generic book and individual dial access carrels. Today, Oklahoma Christian claims to have the largest dial access system in educational use in the United States. Students are assigned carrels, and the library occupies the ground floor of the learning center building, but there is no evidence of integration or even much cooperation between the library and the learning center and little indication that the college is moving toward becoming a realized Library-College.

Oakland Community College, a two-year college near Detroit, also began operating in 1965 with strong emphasis on a multimedia instructional approach. The Director of Instructional Services coordinates all instructional media and the Learning Resources Center Chairman operates the Learning Resources Center. Both the director and the chairman are librarians and participate in the selection of materials, but final decision on selection rests with the instructional faculty. Much of the teaching is conducted by the audio-tutorial method- a combination of audiovisual aids and individual or seminar discussions with instructors. The teaching role of the library staff appears to be minimal.

El Centro Junior College in Dallas, Texas, has organized an Instructional Resource Center which consists of Non-Print Operations, headed by a media specialist (not a librarian); Print Operations, which includes data processing systems, headed by a librarian; and Occupational Education of Library-Media Technicians, directed by a librarian who teaches the technicians courses. The college is equipped with some highly developed technology: three dial-access centers, a dial access language laboratory and a science laboratory in which the audio-tutorial method of teaching is employed.

At Oral Roberts University in Tulsa, Oklahoma, a highly sophisticated arrangement exists of some thirty-two dial access stations in individual library carrels plus several additional classroom stations for group viewing and listening. There are also additional dry carrels in the

library for independent study of more traditional materials. It would be a mistake, however, to equate library equipment with the Library-College idea as it has been presented to us. Equipment alone could be mere gadgetry unless it is used to further independent study under the guidance of cooperative librarian-teachers and teacher-librarians.

Federal City College, created in 1966, began operations in Washington, D.C., in the fall of 1968. Planned as an innovative contribution to higher education in and for a ghetto community, the college has been plagued with dissension and budget problems, but its Media Center owes some of its inspiration to the Library-College idea. The Media Center collects in all media, intermingling them in the collection, and provides study space, group and individual carrels, both wet and dry, conventional reading rooms, and more informal lounge facilities. The center works closely with the campus bookstore and emphasizes paperbacks heavily. Librarians and faculty are closely involved with both selection and bibliographical guidance for the students.

A description of an Educational Materials Center at the University of Papua and New Guinea in the *Libary-College Journal*[5] seems more confusing than enlightening. The author stresses the *separation* of the center from the university library, although he emphasizes the genial relationships between the two. If the library is meant to become the center of the learning process in the Library-College, it is somewhat difficult to accept this as an example. The center does collect the generic book within its limited field of interest—the training of teachers in the evaluation of educational materials and the development of a research project to study the effectiveness of various teaching methods and learning materials.

One of the most exciting techniques utilizing Library-College principles is the work of one inspired teacher at Purdue University. Dr. Samuel Postlethwait, professor of botany at Purdue, has evolved a teaching method, the audio-tutorial, which makes some good, sound sense of the ill-defined independent study concept. He bombards his students with a rich collection of sound tapes and visual presentations on film, slides and tapes. He makes available to them simply operated machines for listening and viewing as well as conventional laboratory equipment; he provides them with worksheets defining specific tasks and experiments and with bibliographies guiding them to printed materials; and he tops off all these aids with a staff of knowledgeable instructors constantly available for personal or group discussion. In his presentation at the 1969 Library-College meeting in Chicago, Dr. Postlethwait made it abundantly evident that an inspired teacher with

extensive resources in many media could make learning the joyous search it ought to be. But it is a little difficult to jump the gap between Dr. Postlethwait's audio-tutorial method and the Library-College syndrome. The library is *not* the center of Purdue's botany course, no, does it seem to have much influence on Purdue's curriculum or teaching methods.

THE IMPACT OF THE MOVEMENT

After thirty or more years of proselytizing, these few partial examples (and the three hundred snippets reported in the "In-Nova" column of the *Library-College Journal*) seem to be the only tangible signs of the impact of the Library-College idea. Dupuy, who investigated the Library-College as well as a number of other technological innovations in college libraries in 1968, found: "There is not today in the United States any institution which would really fit this definition of a library college." Dupuy goes even further. "Despite almost universal endorsement of the objectives of the Library-College movement, there is widespread skepticism among both librarians and educators as to the realism of the movement."[6] In itself, the very meager quantity of specific examples of the Library-College in action is not an indictment of the idea or the movement. Good ideas become irresistible realities only when their time has come, and it might well be that the time for the Library-College is not yet upon us.

CRITICISM OF THE MOVEMENT

Several criticisms of the Library-College have begun to appear recently, and it might be instructive to examine them in some detail. Critics object that Library-Collegians use irritating tactics: a shrill missionary zeal, overstatement, endless repetition of outworn citations and an all too convenient failure to define precisely some of the Library-College elements. Probably all of these tactical missteps could be documented, but a few will suffice. Take, for example, this passage: "... we librarians are in a better position to teach in this new learning mode called independent study, than any of our colleagues in educational work."[7] Now, even if it were true, this is no way for us to be making friends among the faculty; but it is very doubtful that many librarians would agree with the statement. Teaching is more than letting students loose in a library with some bibliographical guidance to their materials. Primarily it is creating the atmosphere within which it is possible and rewarding to learn. Admittedly, much teaching in our

colleges today is badly done, but mere knowledge of the library's resources does not automatically make librarians more capable than their colleagues on the faculty. Many college librarians may, and probably should, teach, but to do so effectively they will need to do much more than point out the resources of their libraries.

The two most important undefined elements in the Library-College concept are independent study and the curriculum. Is independent study to be interpreted as a free or an authoritative mode? Who decides what the student studies independently? How does he evidence the results of his independent study? Does it matter what is included in or omitted from the curriculum? Who decides what is "most significant to man"?

Another aspect of the Library-College literature which makes for uneasiness is a kind of pragmatic patching process. As problems in higher education have received publicity or, more narrowly, as criticisms of the Library-College have appeared, the leaders of the Library-College movement have added arguments and discussion. Among basically important elements which do not appear in the earlier literature are such items as heterogeneity among the students admitted to the Library-College; a firm, continuing and generous financial base; built-in and continuing evaluation; and genuinely democratic library-college governance. Now that these questions have hit the front pages of our newspapers (if not educational literature) they are also receiving some mention in library-college literature, but they have the ring of hurried afterthoughts.

These weaknesses, however, are not insuperable. The Library-College movement could, with a little thought and effort, cut down the stridency, find a few other authorities to quote besides Harvie Branscomb (whose 1940 work *Teaching with Books*, is cited repeatedly), develop definitions, and expand proposals on finances, governance, *et al.* What is more disturbing is a failure to deal with some very basic questions facing all higher education in our nation.

THE LIBRARY-COLLEGE AND EDUCATIONAL FERMENT

Dr. Shores has written: "... the Library-College removes the basic cause for campus unrest, which according to a recent poll is the growing impersonality caused by numbers."[8] Dr. Shores should be more skeptical of polls. Impersonality is not the basic cause for unrest, only one of the precipitating factors. What is really "bugging" our campuses

Kenneth Kister in a recent attack on the Library-College idea comes much closer to the very serious reality. Kister says:

> ... the fundamental objection to the Library-College is its disingenuous attempt to foster the American middle-class success ethic in the student while noisily purporting to educate him for freedom ....He eventually becomes a self-starting learning machine which, when plugged into a wet carrel (Shores calls it the student's "workbench"), achieves instant access to the commodity knowledge which, in turn, constantly increases development of the individual's most important product, success.[2]

students have been weighing a social system which places competitive individualism at the highest priority and have found it wanting. They are seeking for the ways to substitute cooperation for competition, humaneness for success, and democratic participation for elitism. Mind you, not *all* students are actively or consciously looking for a new way to organize life in our society. Not even a majority of the students are engaged in this search, but enough of them are doing so and doing so passionately enough to have affected the whole educational system. The search for a cooperative, humane and egalitarian life takes numerous forms–everything from love-ins and rock festivals to burning Bank of America branches and bombing computer centers. You may support or excoriate any or all of these manifestations, but the fact remains that the search for alternatives is present and growing. To those who are questioning, the Library-College can only appear as another warmed-over version of a competitive, commodity-ridden society.

A corollary of the search for new ways of organizing society is a search for a new code to the educational enterprise. We are witnessing a growing interest in the end-products of higher education. It is no longer enough to know what we are teaching and what learning mode we use to do the teaching. We must now answer the questions: what are we teaching for? and who decides the what, the how and the why of higher education? The mindless production of bigger and better H-bombs or bigger and better automobiles or even bigger and better corporation executives is no longer accepted as the legitimate or desirable result of higher education. To change the goals of education, say the restless students (and some faculty, too), we must guarantee that policies of the educational institutions do not continue to be made by the same closed homogeneous and very small groups which have traditionally governed our colleges.

The Library-College movement has not addressed itself to these questions at all. To speak of an interdisciplinary overview of man's knowledge is not to ensure moral evaluation of the uses to which that knowledge is put. To urge contracts between Library-Colleges and

surrounding private industries is almost to guarantee continued production of what perhaps ought not to have been produced in the first place.

At the 1969 Library-College symposium and again in a 1970 article, Dr. Louis Shores has advocated an early American Town Hall system for the Library-College, although he grants that any one of a great variety of governments could be adapted for the Library-College. Students and faculty would both participate in the Town Hall and each campus could decide, more or less democratically, the composition of the smaller (and real) governing body which would function between Town Hall meetings. The proposal misses an important point in the current educational debate. The furor is not really about form but about content. It is relatively unimportant whether a college is governed by a committee system or an executive board or a board of trustees. What is important is machinery which guarantees that all sections of the academic community have equal opportunity to determine—not discuss, but determine—the policies of the institution. The Town Hall, for all its nostalgic appeal, does not offer any such guarantee. It didn't when it was used in New England townships where it merely confirmed the decisions of the theocratic leaders. It wouldn't in a Library-College unless there also existed full and equal participation of students and faculty in any body which really determines policy.

New social philosophy and new educational demands are being explored because we have in America a new kind of student body. Here again the Library-College movement falls somewhat short of a serious analysis of their new needs, or old needs newly recognized. First of all, it is imperative to recognize a qualitative change in the size of the student body at institutions of higher education. What has happened to our highly industrialized, highly technological society is, in one sense, analogous to what happened to us in the early years of the twentieth century. At that time it began to be apparent that compulsory primary education for all was not only desirable but necessary. Now it is beginning to be just as apparent that coping with the world—surviving—demands of everyone an education that cannot be obtained within the brief span of primary and secondary school years. As a result, would-be educational innovators must somehow deal with a mass need for higher education. To the credit of Library-College spokesmen, it must be stated that they stress "college-for-all." But the Library-College concept does not seem capable of being stretched to accommodate all. Colleges planned for five hundred or a thousand students will not permit all young people (and many older students)

access to higher education. It is neither realistic nor feasible to imagine that our massive multiversities will split themselves up into fifty or more autonomous cluster colleges. Salvation probably does not lie in more small individualistic colleges but in new, imaginative and (regrettable or not) larger but cooperative educational ventures.

Not only is the new student body larger but it is becoming much more heterogeneous. It includes, for the first time in our history, members of minority groups and members of subcultures who do not wish to conform to the dominant white, European, Christian standards. Patricia Knapp, analyzing the Monteith College library experiment, has made a very insightful comment. The library at Monteith, she discovered, made excellent ties with the students who had already adopted the academic style but almost none at all with the nonconformist subcultures.[10] This is not accidental. The Library-College is built on the student's willingness to adapt himself to the existing academic criteria. The Black or Chicano student from the ghetto, the rock-oriented student, or the communal-living student is less and less willing to agree that his background or life-style or subject interests must be set aside so that he can learn the elements of "Western culture." He is not convinced that Western culture is the pinnacle of man's intellectual accomplishment. But neither the college library nor the Library-College is equipped, materially or philosophically, to satisfy his learning needs. Even when the minority group student is willing to conform, the Library-College is probably not for him. E.J. Josey has written that a majority of Black colleges do not have the resources for even a minimal printed book collection, let alone a sophisticated generic book collection together with the equipment necessary to view or hear the materials. Here, again, the Library-College literature stresses form over content. It is not enough to say that the Library-College student body must be heterogeneous and to assume that presto—it becomes so! The small expensively-equipped college which is the prototype Library-College is not likely to become the educational institution in which great numbers of Blacks, Chicanos, Puerto Ricans and American Indians will learn not only how to cope with, but how to alter radically, the society which has never served them.

Finally, the Library-College idea has been attacked by those who believe that librarians are not, and should not be, teachers. John M. Christ, writing in the *Library-College Journal*, maintains that the Library-College idea requires extensive theoretical reformulations and that librarians are not equipped to engage in analytical and abstract thinking.[11] Mr. Christ's hypothesis is unproven and, on the face of it,

sounds untenable. Analytical thought is a human enterprise and not the monopoly of any category of human beings. Even if librarians, because of the nature of their present role in the academic community, have not produced much theoretical analysis, it cannot be assumed that they are incapable of the process. Mr. Christ in the same article, however, and Kenneth Kister at the recent LACUNY Institute at Queens College both maintain that the role of the library and of the librarian in the academic institution is an ancillary, not a central one. The librarian, they claim, deals with procedural and not with substantive matters. It is not easy to gainsay the differentiation. Certainly, that is what the academic librarian has been doing. Whether he should continue to do so is still an open question. Perhaps a few pilot experiments might be in order to test the willingness, the ability and the desirability of librarians in a teaching role. A few library-based seminars might be in order especially a few dealing with subjects which have not become part of the orthodox curriculum and which are of interest to the nonconformist student—communal living or local political action or women's liberation.

CONCLUSION

At this point it is not clear whether the Library-College really has a practical future in higher education. That the idea needs substantial redefinition and revision, and that its proponents need to recognize how deeply they have been influenced by traditional, middle-class, American values, seems evident. One of the things that seems to have happened over the past thirty years is a failure to re-examine and re-evaluate the Library-College idea in the light of a changing social and educational situation. Independent study or the generic book or any of the other elements in the Library-College are not absolutes. They must be redefined or discarded as the world moves. Some of the elements of the Library-College are useful concepts. The college library certainly needs to broaden its collection concept to include the generic book just as college instruction needs to broaden, or discard, the lecture-textbook method of teaching. But even with substantial revision, at this point, it seems doubtful that the Library-College can become a functioning reality.

1. Louis Shores, "A Library-College Decalogue," *Catholic Library World* 42 (November 1970): 154.
2. *Ibid.*, p. 153.

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3. T.N. Dupuy, *Ferment in College Libraries* (Washington, Communication Service Corp., 1968).
4. Patricia B. Knapp, "Involving the Library in an Integrated Learning Environment," in *Libraries and the College Climate of Learning* (Syracuse, 1964); *An Experiment in Coordination . . .* (Monteith College, 1964); and *Monteith College Library Experiment* (Scarecrow, 1966).
5. Ernest Roe, "Library-Materials Center–or Both?" *Library-College Journal* 2 (Winter 1969).
6. Dupuy, *op. cit.*, p. 65.
7. Louis Shores, "The Medium Way," *Library-College Journal* 1 (Winter 1968): 11.
8. Shores, "A Library-College Decalogue," p. 154.
9. Kenneth Kister, "Library-College Land: A Puzzlement," *Library Journal* 96 (March 15, 1971): 935.
10. Patricia B. Knapp, "Involving the Library in an Integrated Learning Environment."
11. John M. Christ, "Problems in Understanding the Library-College Philosophy," *Library-College Journal* 2 (Fall 1969).

ADDITIONAL REFERENCES

Bergen, Dan and E.D. Duryea (eds.). *Libraries and the College Climate of Learning* (Syracuse University, 1964).

Blake, Fay M. "The Library-College Movement, Dying of Old Age at Thirty: A Personal View." *Wilson Library Bulletin* 44 (January 1970): 557-60.

Blumenfeld, Catherine and Robert T. Jordan. "The Federal City College Media Center: A Plan for an Active Service," *Library-College Journal* 1 (Spring 1968): 31-39.

Holly, James F., "Elan, Domes and Dissidents Too," *Library-College Journal* 3 (Winter 1970): 37-44.

Josey, E.J. "Feasibility of Establishing a Library-College in Predominantly Negro Colleges," *Library-College Journal* 1 (Winter 1968): 27-37.

"A Method of Learning: The Library-College," *Drexel Library Quarterly* 4 (January and April 1968).

Sheehan, Sister Helen. "The Library-College Idea: Trend of the Future?" *Library Trends* 18 (July 1969): 93-102.

BEST COPY AVAILABLE

Shores, Louis. *The Library-College* (Drexel Press, 1968).

——. "The Library-College Idea," *Library Journal* 91 (September 1, 1966): 3871-75.

——. "The Library-College Library," *Catholic Library World* 40 (October 1968): 102-107.

——. *Library-College U.S.A.* (South Pass Press, 1970).

Sillers, Dan J.. "New Dimensions in Innovation," *Library-College Journal* 4 (Winter 1971): 10-11.

——. "Practical Aspects of the Library-College Idea," *Catholic Library World* 40 (November 1968): 182-83.

"Symposium: The Academic Library as an Instrument of Learning," *Library-College Journal* 1 (Fall 1968): 12-40.

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a possible contribution of the library-college idea to modern education

by Joan M. Bechtel

The Library-College advocates, leaders such as Louis Shores, Robert Jordan, B. Lamar Johnson, Patricia Knapp, John Harvey, Sister Helen Sheehan and Theodore Samore and their quarterly mouthpiece, the *Library-College Journal,* assail us with ideas that claim to be new, innovative, revolutionary, and experimental but which, in fact, are as old as libraries, certainly as old as Oxford and Cambridge Universities. This is not to belittle, however, the importance of the theme to which they are pointing nor their essential contribution to the current college education scene. Their insistence upon the provision for American young people of an opportunity to direct their own education, to develop their own reflective powers, to grasp for themselves what is essential in the history of mankind, and to decide for themselves what part they shall play in the human society is necessary in a day when colleges and universities are bulging with increased numbers of students, when the temptation to mass educate is no longer seen as a temptation but as a necessity, and when impersonality in education is regarded as evil but inevitable. Library-Collegians further insist that the way to achieve their goal is through the intelligent use of libraries which includes knowledge of the tools for getting at what has been recorded. On these two issues there is little debate, although a good deal of criticism can be and is leveled at many of the other proposals of the Library-College advocates. What then is the Library-College concept?

THE LIBRARY-COLLEGE CONCEPT

"To me a library-college is a college in which the dominant learning mode is independent study by the student in the library, bibliographically guided, intellectually aroused, and spiritually stirred by the faculty."[1] All Library-College proponents agree with this statement by Louis Shores who is called the father of the movement because of his

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speech at the Chicago Century of Progress Exposition in 1934 in which he first used the term Library-Arts College.[2]

The Library-College is seen as an experimental institution in which the compulsory attendance at lectures is done away with and replaced by voluntary reading and study in the library. The extent to which classroom lectures and class discussions are eliminated or reduced is a matter of some disagreement, but all do agree that far too much dependence upon the textbook, lecture syndrome is apparent in American education today.

The library is to become the heart of the Library-College in both a physical and metaphysical sense. Some see the Library-College occupying a building or complex of buildings which has at its physical center the library and, perhaps, bookstore and radiating from it student carrels, faculty offices, discussion rooms and at the outer edge living quarters and administration offices.[3]

The faculty will necessarily be bibliographically expert as well as experts in their subject fields. The librarian will be expected to be subject trained as well as expert in the ways of the library. In fact the lines between librarians and faculty are to blur so that they become equal partners in the teaching enterprise.

The curriculum is to be largely interdisciplinary with students studying the whole experience of man in ways and areas most appropriate to each individual student guided by faculty-librarian tutors. The curriculum is to include for everyone education in the use of the library. This is to include library organization and the ways to use it as well as the intricacies of reviews, abstracts, indexes and bibliographies. "Half of knowlege is knowing where to find it."[4] The suggestion is also made that faculty time will be saved and greater numbers of students will be served by having fewer lectures and by the emphasis on independent study.[5]

The mood of the college is to be innovative. "Almost any change is better than no change at all."[6] This innovation and experimentation is to pervade not only the curriculum, methods of teaching but also the library. The library is to contain wet carrels,[7] that is, carrels containing all kinds of media both auditory and visual so that all forms of the "generic book"[8] may be exploited in fitting learning to an individual student's needs.

Actually there are almost as many versions of the Library-College as there are proponents of the idea. Almost all are small liberal arts colleges of 500 or less. One is student operated, another combined

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correspondence school and Library-College, another combined Library-College and adult education[9] and still another a caravan composed of several trailers which can travel to specific locations for study.[10] Robert Jordan also proposes that the Library-College lease its physical plant from a College Host-Center where it would be one small, liberal arts, experimenting college among a cluster of colleges of various kinds.[11]

CRITICISM OF THE LIBRARY-COLLEGE CONCEPT

Critics of the Library-College movement take issue with Library-College proponents at many points in their proposals. The idea most often criticized, and rightly so, is the idea that librarians will become, in fact, faculty members and share equally in the teaching function. On the surface this may sound like a fine idea, at the same time solving the librarians' problem of lack of status and blurring distinctions in the academic hierarchy. Some librarians may, in fact, become subject experts to the degree that Ph.D. faculty members have become and may share equally in the teaching function. To suggest that librarians on the strength of their library training are sufficiently knowledgeable in subject areas to share equally in the teaching function looks like a thinly disguised method of achieving status short-cutting the usual requisites.

Actually it is not necessary for all librarians in college settings to become subject experts. The essential issue is not status but function. Librarians and teachers serve two different functions. There is a real contradiction between the goals of the librarian and the teacher. The librarian serves to facilitate access to sources of information and the teacher's job is to encourage the student to think about this information, criticize it, incorporate it, and make decisions based upon it.[12]

Librarians need to serve the university or college by making the best choice of information recorded readily available to faculty and students. This need not be a passive mode of operation, merely waiting for the users to appear. Because of their expert knowledge of the ways of the library (which students and many faculty do not have), librarians have an essential role to play in making this kind of knowledge available to all. Librarians need to actively seek ways of promoting the use of the library and the knowledge of its workings for educationally sound reasons, not to enhance librarians' status. Promoting the use of libraries does not automatically promote status of librarians. R.C. Thompson in a letter to the *Library Journal* rightly suggests that faculty status for

librarians can be a crutch. Librarians need to become true professionals in their own right.[13]

Many critics of the Library-College idea attack the attempt to make the library the "heart" of the college. One suspects this may be as much a reaction to such a romantic appellation in what purports to be a hard-headed, realistic, intellectual approach to education, as it is a rational objection. Trevor N. Dupuy doubts the assumption that the library ought to be the "heart" of the college because the "heart" ought to be the place where the "teaching is done."[14] This could as well be for science students, the laboratory. One wishes he had said the "heart" of the college is where the learning occurs which would admit the possibility of the library being the "heart" as well as the laboratory, or even possibly the snack bar, dormitory or classroom.

Robert Jordan's assumption that fewer faculty per student will be needed to guide the student in his independent pursuits is quite likely unrealistic in the extreme. Individual guidance in the library or in the faculty member's office, in fact, takes a great deal of time, likely more than meeting his students all together three time a week.

Louis Shores' and others' insistence upon the inclusion of the latest and most sophisticated educational hardware in individual carrels for students is admirable, if the experimenting college is very careful in its use. Growth in the capability for independent study is not a necessary result of the use of such teaching aids. Software for these teaching aids needs to be designed to encourage students to enquire further, to be an encouragement for further exploration.[15] Just as heavy reliance upon the textbook-lecture method of teaching has led to a good deal of spoon feeding in education, so may total and unquestioning reliance upon sophisticated teaching aids actually stunt the growth of the capability for independent thinking.

Dupuy states that the single most difficult problem connected with the use of audiovisual teaching aids is the lack of good quality, college-level material. Little of worth has been produced commercially, and teachers have difficulty fitting what is available to their individual courses. One solution, of course, would be the local production of what is wanted and needed. At the present time facilities, equipment and time for faculty to do this is not generally provided. Most of the local productions tend to be amateurish in comparison with commercial tapes, radio and television and, therefore, are not exciting to students.

Undoubtedly there is a great deal that can be done well with sophisticated teaching aids. Courses which require the acquisition of basic knowledge which is routine and indisputable is adaptable to this

kind of approach, allowing students to work at their own pace and freeing the professor to go on to other things. Certainly even more advanced material can be presented in exciting ways. A good deal more work needs to be done in this area.

In this connection two programs worthy of note are the biology course developed by Professor Postlethwait at Purdue, and Hampshire College in Massachusetts. Professor Postlethwait has developed an exciting and effective biology course using a multimedia approach along with tutors and class discussions using the knowledge gained.[16]

Founders of the newly formed Hampshire College are seriously concerned with merging what is best in the traditional library with the best in the new technology of communication. Robert Taylor, director of the new library, and his associates are attempting to make the library open ended, amenable to change and an instrument for change in the learning process. A large section of the library is to house the Information Transfer Center (INTRAN) which will include the latest in audiovisual and computer equipment. INTRAN is planned to be a center for experimentation in the development of teaching programs as well as in information retrieval.[17]

Criticism can also be leveled at Library-Collegians' tendency to put total reliance for learning upon independent study in the library guided by bibliographic experts. This method could be as confining, narrow and restrictive as that which they are fighting—the lecture in classroom approach. Students vary in background, interests and ability, all agree. So does subject matter being studied. Undoubtedly independent inquiry well guided will enhance a student's ability to choose information, assess it and use it creatively. However, conversation among students and faculty is as desirable and necessary for the testing of ideas, the synthesizing, and sharing that have always been characteristic of the growth of knowledge. Lecturing by qualified faculty on ideas not easily covered by the "generic book" may also be desirable at some points. One must always beware of supporting one or two modes of teaching and learning when good education necessarily requires a variety of approaches depending upon the needs of the student and what is being studied. Innovation for good education is certainly to be desired. However, the statement that "any change is better than no change at all" is highly suspect because the criteria for judging any program should be its contribution to learning not its degree of innovation.

Educational axe grinding and subtle, or not so subtle, status seeking have no place in the honest pursuit of what is educationally sound and beneficial to learning.

In spite of the many and varied criticisms of the Library-College movement, there is a great deal of interest in its activities as evidenced by attendance at Library-College meetings and talkshops and larger than expected subscriptions to the *Library-College Journal*. Educators generally agree that the independent study mode of education has taken hold in this country and is on the increase. Librarians generally see the need to educate students and some faculty in the knowledge of what there is in the library and how to get at it. The convergence of these two strains explains the interest in the Library-College movement's concern for the teaching of library skills to enable students to pursue their own education. Much present day independent study is conducted on the sink-or-swim method. Some of the brighter students with advisers knowledgeable in the ways of the library are able to exploit the library effectively. But for many students lack of knowledge of the library prevents them from doing quality independent study. In effect, intellectually they remain cripples.

THE ATTRIBUTES OF EFFECTIVE INSTRUCTION

The large question that needs to be asked then by administrators, faculty and librarians, Library-College advocates or not, is how can students be effectively taught the creative use of the library? James Kennedy at Earlham, Patricia Knapp at Monteith, James F. Holly at Macalester, and Thelma Bristow at the University of London have been making serious attempts in this direction. These people have come up with some principles (or facts of life) which must be dealt with before there can be any hope of success for a particular program of education in the ways of the library.

First any attempt to introduce a program of education in library use must have faculty backing. Patricia Knapp's experience at Monteith was that this backing must be more than mere assent to the fact that this kind of education is necessary or even agreement to include a library project in a particular course.[18] Although faculty members serving on the curriculum planning committee had agreed to the inclusion of a particular library project in a course, some either left it out altogether or presented it in such a way that students knew it was not considered important by the professor and, consequently, did not take it seriously. James Kennedy says that the educational climate is crucial to the success of any such program.[19] By this he means that unless faculty members consider the use of the library an important element in education, students will not.

Obviously for instruction in library use to be successful, it must be considered necessary by the faculty. Although, many faculty at first did not consider it so, the experience of both James Kennedy[20] and Patricia Knapp[21] was that some can be convinced through informal contacts with the library staff, actually seeing a program work and by improvement in the quality of students' work. This, necessarily, cannot be accomplished overnight.

The second principle in constructing a library program is that all education in library use must be intimately tied to the subject content of a particular course. Library education is not an end in itself and so must not be taught as if it were. Thus separate courses offered in-library at the undergraduate level aimed toward increasing students' efficient use of the library are educationally unsound.[22] The card catalog, subject heading lists, indexes, bibliographies, reviews and abstracts are merely tools, however powerful, for getting at the information recorded, the content of a field. One suspects that some faculty hesitance to include librarians or education in the library into curriculum consideration is their fear that methods may eventually gain the status of content, an event antithetical to liberal arts education.

Whether library instruction connected with a particular course is given in the library or in the classroom seems to make little difference. Convenience may rule here. However, that it be done during the regular class hour with the instructor present and perhaps participating seems very important as it demonstrates clearly that this is an essential part of the course and not just a frill thrown in for the eager beavers.

A third consideration to keep in mind when planning library education is timing. A short explanation of library use during freshman orientation is useless. Students, however serious they are, will forget whatever has been presented in the way of library instruction unless it is presented at the time when they need it and must use it. Education in library use presented at the beginning of a research project assigned by a professor in a course is likely to be the most effective time. Immediate use of new knowledge and skills is educationally sound reinforcement in learning.

Both Kennedy and Knapp agree also to a fourth principle, that the teaching of library skills must be graded to a student's needs and abilities throughout his four years in college and this education must not be repetitive. Repetition kills the excitement of discovery and so is deadening to the motivation necessary for learning.

THE MONTEITH EXPERIMENT

The staff at Monteith began their program with all of these principles clearly in mind (except that faculty assent was at first considered equivalent to having a project carried out). They were fairly confident that an effective library program could be built on the basis of these four principles. Evaluation of the initial program was discouraging, indeed.[23]

Faculty were very hesitant to put much reliance upon students' independent work in the library because students were uncritical of the materials found.[24] Students were content to "find something on" a given topic and faculty were dismayed at the quality of material chosen. Faculty concluded that students needed close supervision in choice of reading and research material and couldn't be trusted to seek out their own.

During evaluation it also became clear that not only must every project be part of a graduated system of library instruction, be functionally tied to the curriculum with genuine intellectual content, have full faculty support, and be presented at the right time, but it must also have internal coherence, some intrinsic unity.

Faculty and students saw the library projects as bits and pieces, fragmented knowledge, put into the curriculum for utilitarian purposes.[25] To persons whose aim is to gain a mastery over a certain body of knowledge, to understand its inherent unity, and to observe its causes and effects, library projects teaching uses of tools scattered throughout the curriculum and over four years seemed foreign if not antithetical.

Faculty were not particularly interested in the intricacies of the classification system, card catalog, dictionaries, reference books, etc. They were more interested in the organization of scholarly communication. Patricia Knapp and her staff came to see that library organization and the organization of scholarship were not identical. Library organization consists of tools developed by librarians to facilitate library service and is a relatively closed system organized on the basis of subject. The organization of scholarship is open ended and growing. The library is tied to emphasis of permanent relationships when modern scholarship is able to include easily new relationships, insights and concepts. During the Monteith experiment it became clear that these distinctions must be made and understood. This

> . . . means on the one hand understanding that the nature and degree of bibliographic control characteristic of any discipline is likely to depend on the maturity of the discipline, the extent to which its work is cumulative, the economic support society is willing to give it, the social

> structure in which its practitioners work. It means appreciating, on the other hand, that there are communication needs and purposes common to all disciplines. It means knowing and being able to use the tools of scholarly communication, the tools of library organization, and the tools which connect the two.[26]

With these problems in mind, the Monteith staff developed a theoretical framework within which to build a library program and within which to talk about the intricacies of the library. It is offered here because it is useful in relating library skills to the academic community and because it makes explicit simply what is actually inherent in library organization. It is not offered as the final solution or the only teaching method. It is, however, a step in the right direction.

Monteith's framework consisted of a teaching of the "ways" of the library. "Ways" was consciously chosen to represent two facets of library use. First, finding the way means finding the path that leads from where the student is to where he wants to go, from his beginning knowledge to the object of his search. Secondly, way also means the method, the knowledge and understanding of the interweaving of library organization and communication. Knowledge of the method includes knowing how to use the library system and where and how to enter it.

The question that remains to be asked, on the basis of the four original principles and the Monteith findings is, are there particular library projects appropriate to liberal arts colleges that are likely to be educationally effective and accepted by faculty and students? The answer is that there are some which have been tried and deemed successful. But at the same time, it must be quickly stated that a particular college will have its own unique faculty, student body, library and library staff as well as its own aims and objectives. Therefore each college will necessarily have to design its own program of instruction of library skills keeping in mind the principles and experiences outlined above.

EARLHAM'S PROGRAM

James Kennedy has described a sequence of library instruction at Earlham where the faculty already considered the library a vital part of learning.[27] This program began with a very simple test of basic library skills given to freshmen during orientation. The test was given in order to impress upon new students the seriousness attached to library use at Earlham and to find out their level of ability. (Freshmen had been sent Kate L. Turabian's *Student's Guide for Writing College Papers* in the summer in order to prepare for the test.) Earlham's program included instruction in the library for all freshmen in connection with a term paper assigned in a freshman

humanities course. All the students in the course were given an annotated bibliography of the reference and research tools needed for the course. A demonstration of how to use the tools and how to conduct a search was presented in the library. Reference librarians were available during work on the project to give help on specific problems.

The sequence of library instruction continued with instruction to students beginning their major fields and included more specialized tools dealing with particular subject areas. These projects have not been formally tested but were judged successful because of the improved quality of student papers and because of growing faculty interest in the program.

ADDITIONAL MONTEITH PROJECTS

Another series of library projects has been developed at Monteith subsequent to the first evaluation. The first two projects reported in *The Monteith College Library Experiment* had been tested and had gained faculty acceptance by the time the book was written and so merit reporting here.[28] Their value for our purposes also rests on the fact that these particular projects are applicable or adaptable to almost any college situation or course and certainly do not need a full blown Library-College for implementation.

The first project uses three familiar tools and demonstrates the limitations of them, of which the student may not be aware. It also introduces two new tools. The student in an interdisciplinary course on society is asked to research a concept such as independence, group, society, etc. The student begins by looking up his work in an unabridged dictionary in which he finds a detailed discussion of the word and its historic usage. The student then proceeds to the card catalog and the *Reader's Guide to Periodical Literature*. He very quickly discovers that these two tools are largely useless in researching such a broad concept. The student then looks up the word in the *International Index to Periodicals* (now *Social Sciences and Humanities Index*) and probably finds pertinent material among the scholarly works indexed. He then looks up the word in the *Syntopicon* and if he does not find an article on it, he finds it in the index with citations to the articles which refer to it. Having completed the assigned research the student is asked to write a paragraph defending his choice of a synonym for the word he researched necessitating the creative use of the information gained. This assignment is obviously course related, teaches some important library "ways," builds on previous knowledge and requires critical thinking.

The second project designed at Monteith gets at the problem of students being unable to make value judgments about books found on the library shelves. Students in a course are given a background paper detailing the items necessary to examine in the quick appraisal of a book and explaining the significance of each item in evaluating a work. A librarian and the professor discuss this information in class. The students are then required to go to the library to evaluate a collection of ten books having to do with the subject content of the course. They are given ninety minutes in which to rank the books in order of their merit. After all students have done this, another class hour is used to discuss the project. The purpose is to give students some knowledge of how quickly to appraise a book and some experience in doing so. The class discussion that ensued was reported to be extremely lively with active participation of the professor and students.

Both of these projects gained wide acceptance, even enthusiasm, by the faculty. Each was presented within the framework of the "ways."

Further projects, proposed but not fully tested, were designed to lead the student more deeply into the intricacies of the library. In the junior year students in a particular course are given a course outline and schedule of lectures. They are asked to work out their own reading program in connection with the course. In the senior year each student is expected to write a senior paper which will require using all his library skills.

CONCLUSION

The Council on Library Resources and the National Endowment for the Humanities have recently joined the search for library-centered undergraduate programs. Grants have been awarded to Dillard University, Jackson State University and Brown University to develop library programs which will increase students' competence in independent study and research.[29] Hopefully these programs will contribute to existing knowledge of how to go about teaching library skills and how to stimulate independent and creative thinking on the part of students through the use of libraries.

The library projects and the theory of the "way" cited above are presented as the kind of thing almost any college can incorporate into its curriculum to increase student facility in the use of the library. The most important contribution of the Library-College idea is that it reminds us that education is to be student centered; that is, it must encourage students to play vigorous and creative roles in their own education. It is significant that academic freedom originally was spoken of in terms of students and was intended to ". . . mean respect for the intelligence, the individuality and the

maturity of the student."[30] Through the teaching of library skills the student is presented with the tools that will permit him to gain independence in learning, intellectual initiative and true creativity which is grounded in that which has gone before.

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1. Louis Shores, "The College Becomes a Library," *Drexel Library Quarterly* 4(January 1968): 31.
2. Robert Jordan, "The Term 'Library-College,' Genealogy of An Idea: Theory, Practice and Publications," in *The Library-College*, ed. by Louis Shores, Robert Jordan and John Harvey (Philadelphia: Drexel Press, 1966), p. xxii.
3. Bruce Manwaring, "Campus Design," in *The Library-College*, p. 187.
4. Louis Shores, "Shores Library-College," in *The Library-College*, p. 104.
5. Robert T. Jordan, "The Library-College - A Merging of Library and Classroom," in *The Library-College*, p. 48.

   Robert T. Jordan, John M. Gondeau and Louis Shores, *Impact of the Academic Library on the Educational Program*, ed. by Everett H. Hopkins (Washington, D.C.: U.S. Department of Health, Education and Welfare, 1967), p. 13.
6. Jordan, "Merging . . .," p. 46.
7. Louis Shores, "Library-College Library," *Catholic Library World* 40 (October 1968):102.
8. *Ibid.*
9. Jordan, "Merging . . .," p. 58.
10. Robert Jordan, "The Caravan College," in *The Library-College*, p. 75.
11. Robert Jordan, "The College Host-Center and the Library-College," in *The Library-College*, p. 32.
12. Trevor N. Dupuy, *Ferment in College Libraries: The Impact of Information Technology* (Washington: Communication Service Corporation, 1968), p. 65.
13. R.C. Thompson, "Crutches and Crying Towels, a Stand Against Faculty Rank and Status for Librarians," *Library Journal* 95(April 1, 1970): 1260.
14. Dupuy, *Ferment . . .*, p. 66.
15. Trevor N. Dupuy, *Modern Libraries for Modern Colleges: Strategies for Research, Design and Development* (Washington: Communication Service Corporation, 1968), p. 51.
16. S.N. Postlethwait, "An Audio-Tutorial Approach to Teaching Botany," *Drexel Library Quarterly* 4 (April 1968): 84.
17. Robert Taylor, *The Extended and Experimenting College Library: Configurations and Functions of the Academic Library in Transition* (Washington: U.S. Department of Health, Education and Welfare, 1969), p. 5.
18. Patricia B. Knapp, *The Monteith College Library Experiment* (New York: Scarecrow Press, 1966), p. 39
19. James Kennedy, "Integrated Library Instruction," *Library Journal* 95(April 15, 1970): 1450.

20. Kennedy, "Integrated . . .," p. 1453.
21. Knapp, *Monteith . . .*, p. 92.
22. For an example of such a proposal see Daniel Gore, "Anachronistic Wizard, The College Reference Librarian," *Library Journal* 89 (April 15, 1964): 1688.
23. Knapp, *Monteith . . .*, p. 39.
24. *Ibid.*, p. 40.
25. *Ibid.*, p. 81.
26. *Ibid.*, p. 83.
27. Kennedy, "Integrated . . .," p. 1450.
28. Knapp, *Monteith . . .*.
29. "Grants for Library-Centered Undergraduate Programs. . . ," *Wilson Library Bulletin* 44 (June 1970): 996.
30. Henry Steele Commager, "The Problem Isn't Bricks. . . It's Brains," *New York Times Magazine* (January 29, 1956), p. 74.

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Swarthmore College's "teaching library" proposals

by John G. Williamson

The following are observations and comments upon the teaching library proposed and partially implemented by the faculty of Swarthmore College. Dr. Williamson was Assistant Professor of European History at Swarthmore at the time the proposals were made; he has since become a professional librarian and is currently Associate Acquisitions Librarian at the University of Delaware. His participation in the formulation and implementation of the plan as a faculty member, and his subsequent education and experience as a professional librarian, afford a unique opportunity to comment upon this program and the future of the academic library in education.–Ed.

In the fall of 1966, Swarthmore College initiated a series of studies designed to illuminate its future development as a small, independent liberal arts college. The first tangible result of this analysis was the book, *Critique of a College.*[1] Published in November 1967, its eagerly awaited arrival on campus inaugurated an exhaustive debate on its 191 recommendations and the philosophical considerations underlying them. These debates centered on the instructional, faculty, and administrative issues treated in the first and longest of the three reports in the *Critique*, the "Report of the Commission for Educational Policy," or CEP Report. The *Critique* also contained, however, the substantial (64 page) "Report of the Special Committee on Library Policy," which considered how the library might best support the goals outlined in the CEP Report. The central recommendation of the Library Committee report was that Swarthmore transform its traditional "custodial" library into a "teaching" library. My purpose here is first to explain just what the teaching library was conceived to be; second, to discuss faculty reactions to the teaching library proposals and what has been done to implement them since; and last, to offer some reflections on how librarians can best serve the educational community.

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THE TEACHING LIBRARY CONCEPT

As pictured in the Library Committee report, the teaching library stops considerably short of the Library-College concept. Indeed, the report explicitly rejected the latter, dismissing it as "only an idea, offering more promise than proof."[2] The teaching library not only concedes to the faculty its traditional functions but accepts the obligation of helping the faculty fulfill these functions in the most efficient manner possible. At the same time, however, it aims at providing the student with the library skills and bibliographic sophistication for life-long independent work. In other words, rather than shifting the locus of instruction to the library as the Library-College would apparently do, the goal of the teaching library is merely *to extend* faculty-centered, discipline-oriented studies to include development of research ability and bibliographic sophistication to levels not normally achieved by undergraduates. As the report put it, the aim of the teaching library is to make a "conscious effort to train the student in the proper use of the resources of the library as an organized body of information."[3]

The principal assumption behind the recommendations for achieving the above goals was that the sort of graduate training each faculty member himself had received might serve as a model which could be modified to suit Swarthmore's needs. To quote again from the report:

> Operating in conjunction with a university research library, graduate students acquire bibliographic skills from necessity, in departmental bibliography courses, or in the process of fulfilling other curricular requirements, with the assistance of instructors in their departments or, occasionally, of library personnel. The interplay between faculty and library systems works well in graduate training, because graduate students come to depend increasingly on the library as they cut loose from their dependence on courses and devote more of their study time to reading and research, on an increasingly independent basis.[4]

In contrast to the graduate schools, however, the intention was to provide bibliographic training across the "entire range" of the student's studies, not merely in one specialized area. It followed from such reasoning that the library itself was seen as differing from a university research library mainly in scale and in communities served. Although the teaching library need not support research at a university level of sophistication, because it is serving undergraduates untrained in bibliographic methods, it must provide proportionately more, and more aggressive, reference service than a university library. In addition--and this is where the burden of the specific recommendations lay--the teaching library must assume the initiative in establishing effective collaboration with the faculty in teaching library skills.

THE TEACHING LIBRARY PROPOSALS

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The twenty-six proposals by which these meritorious ends were to be achieved fall into four overlapping groups.[5] The first category, proposals 16–21, cover a miscellany of purely administrative and extraneous matters. They were included rather against the wishes of the Library Committee because the administration sought to avoid any appearance of creating *faits accomplis* even in relatively trivial matters. The library, for example, is enjoined to catalog and oversee the use of the college's A-V materials. The faculty, clearly somewhat puzzled by being asked to deliberate about such trifles at all, passed the recommendations in this group without much discussion. The other three groups of proposals, concerning the library's teaching responsibilities, the collection, and the status of the staff, proved more controversial. Ultimately only one proposal failed to pass, although it was an important one. The faculty votes, unfortunately, did not always express genuine conversion to the concept of the teaching library. As the debates and comments made afterward over martinis made all too clear, far more covert opposition existed to the assumptions underlying the proposals than the votes revealed.

The key recommendation (number 5) in creating the teaching library was "That there be appointed to the library staff two Divisional Librarians, one trained in the humanities and one in the social sciences, to assure the proper response to the teaching needs of these two divisions." "Teaching needs," however, were broadly interpreted to include responsibilities that were multifarious indeed. More specifically, the division librarians were to play the central role both in building collections and in integrating library instruction with formal course work and independent studies. As will become clear when the division librarians' duties are more fully elucidated, the fact that the teaching library remains largely an idea is attributable to Swarthmore's inability to fund the requisite positions. These difficulties, it must be emphasized, reflect adverse circumstances rather than administrative foot-dragging. The academic crisis of 1968-1969 at Swarthmore, during which President Courtney Smith died, led to new, expensive, and unexpected commitments elsewhere that temporarily thwarted promising initial efforts to appoint divisional librarians. But appropriate institutional support is presently being sought, with the expectation that a humanities librarian can be appointed late in 1971 or in 1972 and a social sciences librarian shortly thereafter.

Recommendation 1, "That experience and proficiency in the use of library materials be made an integral part of courses of instruction,"

was accepted without great opposition, although some faculty members stated openly that they did not consider teaching library skills to be even partly their responsibility. The faculty also added the rider, "where appropriate," and the Library Committee report itself recognized that the proposal would not come to much unless the division librarians were fairly aggressive in assisting the faculty to carry it out.[6] Unless such assistance were forthcoming, the report assumed that the faculty would simply abandon the effort because of the heavy added burden it placed upon them.

Such, in fact, was my own reaction. In 1969 during the second semester of the basic European history course (covering the period 1715 to the present), we offered students the option of writing the usual sort of term paper or making up an annotated bibliography of contemporary magazine articles on some problem from the period 1870-1914. In the absence of the division librarians, the other instructors and I had to introduce the students to the appropriate guides and indexes ourselves. Our experience revealed that the students were, in fact, as innocent of library expertise as the Library Committee report assumed, so the entire project required an inordinate amount of supervision. Although the students claimed to have found the project both exciting and useful, estimates which the results of their labors seemed to justify, we decided not to repeat the project in 1970 because of the stupifying amounts of work involved. Checking dubious citations, for example, was extraordinarily time-consuming. I have reason to believe, moreover, that our experience was atypical only because we were among the few faculty members who made any effort to carry out recommendation 1.

This failure is perhaps partly an evidence of faculty intrasigence and partly an indication of the difficulty in working up assignments that serve the ends of a given course while at the same time fostering library skills. Faculty members are perhaps less imaginative in devising such projects than they might be, but most are genuinely puzzled about how to go at it. It is also true, unfortunately, that intellectually taxing projects need not involve the library, while difficult library assignments may be intellectually trivial. Earlham and Monteith Colleges are among the very few places where meaningful library work has been integrated into the curriculum, in part because the librarians themselves were able to give the faculty the specific, practical advice it needed on such matters.[7] What all this means is that the divisional librarians will not only have to be imaginative about how they offer their services to faculty members but will have to assume the lead in concocting suitable class projects.

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THE INDEPENDENT STUDY PROPOSALS

To return again to the proposals themselves, proposal 2 was "That the curriculum assure the experience in self-instruction through independent reading." The faculty modified this proposal to read, "That the curriculum *afford the opportunity* in self-instruction through independent study," which is not quite the same thing. The objection to the original wording was that it was too prescriptive; was *everybody* to be forced to do independent work? Although certain other innovations which foster independent study have proved popular and not unsuccessful, in particular student-run courses, there has been less *individual* independent study than might have been hoped. The reasons for this, I think, re-emphasize the importance of the division librarians.

The first thing that occurs to a student when he wants to do independent study is to ask an instructor if he will direct it. The instructor's usual retort is to ask the student if he has prepared a bibliography. This brings the student up sharply, because *he* had been intending all along to ask the instructor for a reading list; after all, the faculty claims to know the books. But as most of us know, reading lists on special topics are not to be shaken out of one's sleeve. Many independent study projects stop at this point. Instructors are inclined to consider that if a student does not have a topic sufficiently in hand to prepare a reading list, he ought not be doing it. This is an unduly exacting judgment. Students dislike admitting that they know little about how to find things in libraries, because it looks like it should be easy and yet is difficult. But if students' bibliographic skills were fostered along the way, and if the division librarians were available for guidance as independent projects progressed through their various stages, the principal grounds for faculty opposition to such projects would be sharply undercut. The number of such projects might hence increase markedly.

The third proposal was "That each student be required to demonstrate some skill at independent inquiry as he progresses through the curriculum and as a major requisite for graduation; and that he spend at least one semester with a reduced course load, appropriate to the scope and difficulty of his project, in order to be free for independent study." It failed to carry. Many faculty members thought that the weaker students, breasting with difficulty the tide of regular course work, would be swept under by a research project. One may well ask where such a project could succeed if not at Swarthmore. In fact, sociology, Swarthmore's newest department, has since 1968 required a

senior thesis of its majors which meets the terms of proposal 3. Other departments are reaching in the same direction.

Why, then, was the faculty so pessimistic initially about the proposal? First, there was a tendency in all of the discussions to consider each proposal in isolation rather than as a part of an integrated whole. Thus it was not sufficiently appreciated that students who had already acquired the experience foreseen under proposals 1 and 2 could manage intellectually respectable independent projects of some magnitude. Second, if my own misgivings at the time were typical—and I hasten to add that I voted in favor of proposal 3—too many of us were mentally setting unnecessarily high standards for such student projects. Work may be useful without being publishable. (The converse is also true.) Certainly the experience of pushing into a topic as far as the limits of the sources and one's intellect permit is an extraordinarily useful and exciting one, and one every student should have.

OTHER PROPOSALS

Two of the remaining four proposals bearing directly on the teaching functions of the library require little comment. They are presently provided by most research libraries and essentially require the enlarged reference staff that the divisional librarians would provide. The proposals were simply "That reference services be provided during selected evening hours and that the entire library building be open to midnight," and "That a new student handbook to the library, containing bibliographic annotations on reference sources be provided." Although evening hours have been extended, the other provisos remain on paper. The problem is that Swarthmore's only reference librarian, a first-class man, is responsible for the government documents collection, interlibrary-loan services, and for building the reference collection. Swarthmore has a strong tradition of self-service rather than reference service.

Proposal 8, "That each instructor teaching a seminar be required to weed his Honors Reserve periodically. . . ," was accepted without much comment and almost universally ignored. This measure was seen as complementary to recommendation 1 because it was thought that maintaining vast open-shelf honors reserves subverted the attainment of library skills and amounted to keeping the college's most able upperclassmen on bibliographic leading strings. Accentuating the subversive effect of these reserves is the habit most instructors have of providing very fat syllabi suggesting core and supplemental readings for

their seminars. Indeed, they take rather a pride in placing these and other "important" books for the seminar in a single location in order that the student may see them together and get at them easily. The result was, and still is, that while honors is a stimulating and exciting way to teach, the reading is laid out in a manner which virtually assures that even the diligent student will not read beyond the seminar shelves.[8] It is possible that effective division librarians will be able to educate the faculty about the need to carry out recommendation 8 in the spirit intended. The greatness of Swarthmore, however, was largely built on the ability of the honors program to attract able faculty and students, and the program's success is but another testimonial that very effective teaching methods may actually work against the acquisition of library skills.

REFORMS IN COLLECTION BUILDING

In addition to requiring the library to assume a more active role in meeting the educational purposes of the college, the Library Committee recognized that traditional methods of collection-building would no longer suffice. To date, Swarthmore has depended largely on faculty recommendations for acquisitions, with the usual results. What there is, is excellent, but over the years too much has not been bought. Some fields, such as sociology, anthropology, and Asian history, were formerly not in the curriculum. In others, the responsible–or irresponsible, some would say–faculty member had neglected his buying duties. Thus, although it was proposed to fill gaps, or *lacunae*, as they came to be called, in existing areas of faculty interest by means of a non-recurring quarter-million dollar grant, the problem remained of how to prevent *lacunae* from developing in the first place. The solution chosen was the one increasingly adopted by the major research libraries, namely, withdrawing primary acquisitions responsibilities from the faculty and placing them in the hands of subject specialists–the ubiquitous divisional librarians.

Although the Library Committee report did not foresee that Swarthmore's 350,000-volume collection would ever be able to meet any but the most basic faculty research needs, it was intended to bolster it sufficiently so that faculty could complete on campus all course preparation and students much of their independent work. The report also specified that foreign language materials be acquired "according to the same functional standards as books in English."[9] The faculty's joy was unbounded when it learned of the huge grant it was to disburse, but it set up a terrible howl when it learned that it was to

be partially stripped of its cherished acquisitions functions. One would have supposed, listening to the debates, that filling out order cards was the noblest and most entrancing work in Christendom.

Closely tied to the collection-building proposals was another, "That a general undivided acquisitions budget should replace departmental allocations in the library budget." Regarding this proposal too with grave suspicion, the faculty altered it to read, "That an undivided budget with suggested departmental guidelines replace the departmental ceilings of the allocated budget."

The reasons for opposing transfer of acquisitions responsibility to the library were numerous. Basically, everyone feared that his was the ox to be gored. Departments that ran out of money in March feared that, with the divisional librarians ordering books on Italian literature and other fancies not in the curriculum, funds would be gone by Christmastime. Underspending departments feared that the reckless disbursers, such as history, would profit from profligacy and that they would suffer from their "momentary" abstemiousness. Most faculty members also held that the divisional librarians could not possibly order half so astutely in their fields as they themselves did. The feeling was general that the $30,000 a year that the divisional librarians were to cost might better be spent on books. That was rather my own view, and I recall voting for the divisional librarians mainly because the teaching-library proposals seemed to require them and because I believe in the division of labor—which is to say I was tired of filling out cards. No one seems to have considered that the acquisitions budget was going to be very considerably enlarged, or that, typically, subject specialists are very effective lobbyists when it comes to getting more money for books. In fact, the enlarged acquisitions budget is apparently converting some former faculty opponents of library-centered acquisitions—spending money has become a very onerous task.

LIBRARIANS AND FACULTY

Aside from the fact that faculty members are conservative and occasionally intractable persons, what is one to conclude from this? Mainly, I think, that faculty members do not really grasp the difference between expert knowledge and bibliographic control. They know the books of their specialties through long years of study. This accretion of knowledge is for the most part bound up with their interests in a particular discipline and from a bibliographic point of view is rather haphazard. Usually faculty members are but dimly aware that the bibliographic aids they commonly use represent merely a small part of

a large network of bibliographic controls. The idea is foreign to them that knowledge of books in general rather than knowledge of books in a particular field is not only something that can be acquired but is a worthy discipline in itself. Many have little idea of the range of guides and finding aids that a librarian takes for granted, including such basics as Winchell.

The final group of proposals comprised those intended to enhance the status of the library staff in a manner befitting their new responsibilities. Mainly involved were improved benefits, the right of the senior staff to attend faculty meetings, and the inclusion of the Librarian in the key faculty committees. The faculty assented willingly enough to these proposals. In doing so, however, it was by no means expressing a conviction that it considered the functions of the library staff equal in importance to its own. In the case of staff benefits, in particular, the faculty acted rather out of sense of *noblesse oblige* to right wrongs it felt had existed too long. When it came to a question of which committees the Librarian was to serve on, however, the lay of the land emerged clearly enough. One proposal, in the CEP rather than the Library Committee report, "... that the Librarian be an *ex officio* member of the curriculum committee," elicited one philosopher's opinion that he could see no reason why the Librarian had any better right to be included on the committee than department chairmen, whom it was not proposed to include. Yet virtually every curricular proposal affects the library, whereas relatively few affect any given department. The need for the Librarian to be intimately informed about current thinking in curricular matters would thus seem to be manifest–only it was not.

The Library Committee report predicted that the "teaching library...is not something that may be bought tomorrow; it will take, especially in its educational functions, years to develop."[10] An accurate estimate. Until at least one divisional librarian is on campus, any judgment of the teaching-library concept is premature. Since so much depends on the divisional librarians, a word on their qualifications is in order. The report called for "a doctor's degree in a relevant subject field, a library degree, and experience in both classroom teaching and library work." "Plainly," the report estimated with sweeping understatement, "persons meeting these qualifications will not be easy to find."[11] In addition, the divisional librarians will clearly have to be persons of considerable force and persuasiveness, *suaviter in re, fortiter in modo*. Initial efforts suggest that finding a person with the requisite qualifications may be easier in the humanities than in the social

sciences, though the recent collapse of the academic job market may have changed that. Still, the positions and their career potential are singular enough so that one might well think twice about accepting one of them.

If there are any lessons to be drawn from the fate of the teaching library to date, the main one would seem to be that such a concept must depend for its realization on library rather than faculty initiatives. It is not that the faculty deliberately opposes such schemes, merely that the old ways require less effort than the new. A continuing educational effort is hence required to create understanding of the benefits of library instruction and the methods by which it is best encompassed. Rightly or wrongly, the burden of proof is on librarians in such matters. It is thus unfortunate that the divisional librarians could not have been appointed when faculty discussions of the Library Committee report had at least begun the education of the unwashed. Turnover among junior faculty is high at Swarthmore, and many of those who attended the original debates have now departed. New faculty members know little about the "teaching library." It will be the work of the divisional librarians to instruct them.

SEPARATE AND EQUAL

Although I have misgivings about whether too much is expected of the divisional librarians, the teaching library would otherwise seem to be a practical approach to making academic library collections more accessible and beneficial. If the library teaches effective use of collections, instructors can concentrate on those things they do best, and students will come to see the library as the information system it truly is. Students who learn to think of the library in this way may, as they become scholars and teachers, be more willing to accept the intervention of bibliographic specialists between themselves and their documentation. For the teaching library, the Monteith experiment, and the excellent library instruction at Earlham constitute only part of the solution to the problem of opening the bibliographic store to the user.[12] In addition to teaching the user how to find his way about, librarians must learn to intervene more effectively between the user and the information he seeks. The sort of service provided now by the best special libraries in science and technology represent the ideal we must attempt to realize in the more general context of the academic library.

The suggestion that the special libraries mark the way of the future has a number of implications. Most importantly, perhaps, it implies that

both faculty and librarians must agree to accept a sharper differentiation of the functions of each group than has been true in the past. Each group would gain from this, the librarians in terms of greater career satisfaction and enhanced professional prestige and faculties in terms of more and better scholarship. Faculty members find it increasingly difficult to teach, do research, and keep up with a ballooning mass of professional literature. They would profit if they could (and would) confine themselves to teaching and writing. While hunting up material is now part of the game, it is a very time-consuming part, and in the end what one does with the material afterwards is what counts, not the act of finding it. If scholars could turn much of this basic retrieval work over to others, to bibliographical specialists, they would have more time to think and would be far less apt to miss important material, particularly in related major fields. Some important happenstance discoveries—odd facts found in illogical places—will be missed, but the exponential growth of the literature will eventually force us to sacrifice the chance discovery for the sake of broad and systematic coverage of the literature as a whole.

To provide such bibliographic services will require more than additional subject specialists, necessary as the latter may be. Librarians must pursue more actively the provision of information-repackaging services such as the special libraries now provide.[13] Librarians must also furnish themselves with the tools to make more complex literature searches than are now readily possible. To accomplish these aims, especially in fields where books remain the dominant form of publication, we shall require catalogs with subject-headings more helpful than "Access to airports," "Radio-active waste disposal in the ground," and "Vertically rising airplanes." We shall probably also need classifications better suited to machine-retrieval than Dewey or LC. Given current budgetary stringencies, such desiderata may seem impractical, and I would be the last to deny that developing more efficient bibliographic tools will be, at best, a difficult and time-consuming proceeding. Still, it is not enough to teach others to find their way about in the librarians' disorderly house. The house itself must eventually be set to rights.

Library skills are indeed an art, but they are a practical rather than a liberal art, more akin to computer programming than English literature. Librarians must develop these practical arts into the science they ought by rights to be. In addition to its more obvious benefits, such a development might also go far to resolve those problems of status which trouble some librarians.[14] If faculty members sometimes

hold librarians in less regard than is justified, it is because much of what librarians do looks like just the sort of inconsequential work that no one with brains would want to do. For this reason, even genuine scholarly qualifications by which I do not mean a second M.A. do not carry the weight in faculty circles librarians sometimes assume. With the exception of senior staff, librarians who are accepted in faculty circles as equals are accepted because of personal or scholarly attainments and despite their vocation. I submit that this situation is not likely to change until librarians equip themselves with the tools to assist faculty and students *actively* in the work of scholarship. When librarians can provide the range of bibliographic services alluded to above, they will be visibly and obviously indispensible. Faculty and librarians will engage in a scholarly collaboration of equals, each with sharply defined responsibilities, and status problems will take care of themselves.

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1. *Critique of a College: Reports of The Commission on Educational Policy, The Special Committee on Library Policy, [and] The Special Committee on Student Life (Swarthmore, 1967).*
2. *Ibid.*, p. 338. In the course of writing this paper, I benefited from numerous conversations with Dr. James F. Govan, Librarian, Swarthmore College, on this and other questions.
3. *Ibid.*, p. 349.
4. *Ibid.*, p. 339.
5. The proposals are summarized in *Critique*, pp. 459-461, which is the source for the texts of those proposals quoted below.
6. Professor Charles E. Gilbert, Provost, Swarthmore College, kindly lent me the faculty meeting minutes from which this and other amendations quoted below are taken. In all cases, italics are mine.
7. See James R. Kennedy, Jr., Thomas G. Kirk, and Gwendolyn A. Weaver, "Course-related Library Instruction: a Case Study of the English and Biology Departments at Earlham College," in this issue; Patricia B. Knapp, *Monteith College Experiment* (New York, 1966).
8. For those unfamiliar with the Swarthmore honors program, it might be noted that honors papers are written against tight deadlines and are typically literature surveys of roughly five single-spaced pages on topics such as "The Changing Structure of the European Economy, 1870-1914."
9. *Critique*, p. 362. Recommendation 9 covered collection-building and maintenance.
10. *Ibid.*, p. 345.
11. *Ibid.*, p. 357.

The library-college does not seem to me to be a solution to this, or indeed other problem. Fay M. Blake, "The Library-College Movement," in this issue, the necessary, and there is hence little point in my flogging the dead horse.

For a suggestive experiment in providing such services in a more general context, see Leonard H. Freiser, "Reconstruction of Library Services," in *Present Status and Future Prospects of Reference/Information Service*, ed. by W.B. Lederman (Chicago, 1967), pp. 48-56.

See, for example, M.P. Marchant, "Faculty-Librarian Conflict," *LJ* 94 (1 Sept. 1969): 2886-89. Librarians should bear in mind that in any serious clash with faculty they are likely to be outmanned and outgunned.

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guidelines for bucking the system: a strategy for moving toward the ideal of the undergraduate library as a teaching instrument

by Patricia B. Knapp

The following originally appeared as part of a paper, "The Library, the Undergraduate and the Teaching Faculty," which was presented at the Institute on Training for Service in Undergraduate Libraries sponsored by the University Library, University of California at San Diego, August 17–21, 1970, which was conducted under a grant from the U.S. Office of Education, Title II-B, Higher Education Act of 1965, P.L. 89-329, as amended.

In order to work toward the ideal of the undergraduate library as a teaching instrument, we must begin by developing as clear as possible an understanding of those elements of the academic world which will inevitably play an important part in the outcome of our efforts and by determining to *use* this understanding as a *positive* contribution to the development of an active campaign to achieve our goal. Specifically, with respect to the faculty:

1. The trend toward professionalization of the disciplines brings along with it a sense of identification with the disciplinary peer group and a corresponding distrust of–and some degree of immunity to–the local administrative hierarchy. We should not attempt to achieve our objectives by way of administrative fiat, but we should use whatever administrative support we can get in seeking access to the faculty. In addition, we should de-emphasize the bureaucratic style of library operations as much as we safely can.

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2. Faculty members are sincerely concerned about their teaching effectiveness and, at the moment, they are feeling guilty because they are under attack for alleged neglect of their teaching duties. We should do our best to capitalize on this situation by making it known, in an aggressive but diplomatic way, that the library and its staff have both the willingness and the capacity to help. We should also support, in any way we can, the efforts of those faculty members who attempt to achieve a redress of the balance between teaching and research on the campus.

3. Most faculty members know little about learning theory or instructional methodology but their attitude toward these matters is usually one of indifference or contempt. This means that librarians who are knowledgeable in these areas have an important contribution to make but that they must be extremely circumspect in making it.

4. Faculty members, quite rightly, regard use of the library as a means toward the achievement of their own teaching objectives. We must, therefore, guard against our own tendency to view library use or skill in library use as ends in themselves. (Those who regard, as I do, the ability to use the library effectively, like the ability to write effectively, as one of the attributes of the liberally educated man, must discretely propose this objective as a rather nice bonus that the student can collect incidentally as he strives to attain the instructor's course objectives.)

5. The faculty has limited understanding of the intellectual processes involved in sophisticated library competence. We must avoid technical, high schoolish programs of instruction in use of the library, developing and using, instead, individual self-teaching devices to convey such how-to-do-it skills to those students who need them, *when* they need them. Since we are far from secure in our own understanding of the intellectual processes in library use, we must also strive to overcome this weakness by attempting constantly to identify and make explicit these processes in our own work.

6. The potential for active collaboration between the library and the faculty varies from discipline to discipline as well as from individual to individual. We must, therefore, be alert to the possibilities at both levels, deliberately cultivating the faculty in departments whose fields seem promising and at the same time making the most of every contact with any library-minded professor.

With respect to students:

1. The single most important influence on the student's academic behavior is the GPA perspective. In order to get the highest payoff for

our effort to increase the library's contribution to the educational program, therefore, we must work primarily with and through the faculty.

2. An important item on the agenda of the student activists, at least of the moderates, is improvement in the quality of undergraduate teaching. We must support these students in this effort. We might, for instance, try to involve the most talented of such students in examining the potential role of the library in excellent teaching and in developing plans to see that this potential is realized.

3. The student sub-culture which has been labelled "non-conformist" combines intellectual interests with a rejection of institutional pressures toward the GPA perspective. We should, therefore, explore ways of working directly with students in this category, if possible involving them in plans for making available library activities, materials, and services which meet their interests.

With respect to the undergraduate curriculum:

1. The most serious obstacle to the development of a coherent and effective undergraduate curriculum for general, liberal education is the power of the competing graduate programs in the disciplines and of the "credentialism" which accompanies it. We must support the efforts of those who recognize this phenomenon and oppose it, participating formally, if possible, informally, if not, in any campus activities concerned with curriculum study and reform.

2. Another serious obstacle stems from the fact that the undergraduate teaching staff has no identity as such, no claim to autonomy in its work. We should, therefore, make the most of any exceptions to this general rule, establishing relationships with, proposing library programs for, whatever councils, separate colleges, or other administrative entities there may be.

With respect to the university as an organization:

1. The power structure and goal orientation characteristic of the type of university in which the undergraduate library is likely to occur produce an environment which is hostile to emphasis on undergraduate instruction, as such, but highly favorable to objectives having to do with developing students' intellectual and scholarly skills. In making the case for use of the undergraduate library, therefore, we should stress its relevance to intellectual and scholarly work rather than to undergraduate education or the undergraduate curriculum.

2. The university is a professionally-oriented complex organization. Understanding the characteristics of this type, we should be neither surprised nor disturbed to recognize that the teaching faculty regard the

library as having a "service" function, as playing a supportive, subsidiary part in the educational program. What is important is not the label placed on our contribution but that it be significant.

3. Coordination of the tremendous range and variety of library activities necessitates an hierarchical organizational structure for the university library system and a consequent limitation on the autonomy of any individual professional librarian. The resulting disparity between the "academic style" of the professor and the "professional style" of the librarian is an obstacle to the achievement of a colleague relationship. Library policies and procedures, therefore, should be reviewed and revised to the end of giving the individual professional librarian as much authority and responsibility as is practicable without damage to the system as a whole.

With respect to the undergraduate library in the university library system:

1. The university library system is quite naturally and inevitably responsive primarily to the library requirements of the graduate and research programs of the university. This means that an effort to enhance the contribution of the undergraduate library calls for conscious and deliberate measures to: (a) identify in a *positive* way the unique functions of the undergraduate library, (b) recruit and/or train librarians for the undergraduate library staff who have the particular qualifications which would enable them to collaborate actively with the teaching faculty (e.g., a commitment to the teaching enterprise, a broad liberal arts background of high quality, and thorough understanding of curriculum design, learning theory, and instructional methods), and (c) make certain that this staff has access to the faculty, that it is involved in all levels of planning.

2. Operations in the university library system are designed to serve the needs and the style of the individual scholar. To the extent that the undergraduate library is obliged to follow this operational pattern, its efficiency in providing necessary mass service may be severely limited. We must develop ways of rationalizing mass library service to undergraduates in cost-efficiency terms, but in doing so we must build into our calculations: (a) a better understanding of the differences between the "approach" requirements of the individual and the large group; (b) an acceptance of the idea that most of the materials used in undergraduate education are not rare or irreplaceable but expendable the more they are used up in the learning process the better; and (c) recognition of the fact that student time is a crucial element in the cost part of our equations.[1]

3. The inescapable necessity for mass service in the undergraduate library underlines the validity of what I have called "the instrumental perspective" to such an extent that it threatens to swamp any other view. We must, therefore, distinguish carefully between mass service and the other legitimate undergraduate library functions, make mass service as efficient and economical as possible, and use whatever savings there may be to support these other functions.

None of the recommendations presented above offer much in the way of concrete, practical actions that can be put into effect immediately. But for library administrators and undergraduate librarians who are truly committed to the teaching perspective, they may serve as a useful long-range set of "guidelines for bucking the system."

1. An excellent beginning to the rationalization of library service, one in which the time of the library user is included as a cost factor, is offered by Phillip M. Morse, *Library Effectiveness: A Systems Approach* (Cambridge: M.I.T. Press, 1968).

active established programs

A major problem facing the librarian interested in library instruction is lack of published information on implementing a program. There is need for information both on the philosophy and rationale of operating a program and sufficiently detailed instructions and descriptions. In this section we have assembled five articles which attempt to fill this gap. Verna Melum summarizes current activity in the field and tabulates well-known programs and their aspects; Millicent Palmer shares her experiences, discoveries, and conclusions as a fulltime library instruction librarian; James R. Kennedy, Jr. details the operation of the program at Earlham College; Martha Hackman outlines the reasons for individualizing instruction at California State College at Los Angeles and the broad concepts of the revised program; and Beulah Howison provides most useful instructions on how to construct a presentation with appropriate audiovisual aids.—Ed.

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1971 survey of library orientation and instruction programs

by Verna V. Melum

New keys to intellectual development in today's world are being forged nationwide. Notches are being cut, edges are being smoothed, new master keys are emerging. To do nothing about new library orientation and instruction keys is to leave today's students with keys of the blacksmith era. Keys that worked—or were thought to work—yesterday are fast becoming antiques.

Today's librarians are searching diligently for punch press operations to meet the needs of library users in the seventies—a fact supported by two surveys I have made. In the spring of 1969, while on sabbatical leave, I discussed library orientation with librarians on over fifty campuses, from the smallest to the largest, from coast to coast. My observations and conclusions from these consultations have been sent to the libraries visited and will appear in the September 1971 *Wilson Library Bulletin*. This spring (1971), I have corresponded with over seventy librarians, again in schools of varied enrollments in many geographical areas.

The eighty-one replies to 107 questionnaires sent out indicate that library orientation is flourishing. Only *one* reported no orientation program. All others reported on their current activities and plans. Seventy-four colleges and universities are included in the tables of this survey (seventy-six different libraries). Five which responded are not included because of the brevity of their reports. But every answer is greatly appreciated; the seventy-six percent response is highly gratifying and certainly indicative of the interest in programs of library orientation and instruction.

I had visited, in 1969, thirty-two of the libraries included in this survey and I wrote them this spring (1971) to update my information. Some reported changes in the two-year period. The other libraries in

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this study were chosen for a variety of reasons: mention in the literature, recommendations of librarians, inquiries I had received, size and type of campuses. No doubt I have missed many good programs, but I have endeavored to obtain representative coverage.

Although this study is narrow in scope in comparison to the number of academic institutions in the nation, the data from campuses of varying size and geographic regions indicate simultaneous, concerted, unpublished interest and effort, on campuses small and large. Both of my surveys refute the notion that little can be done for large enrollments. No large school claims to reach all, or even a majority, of its students, but many large universities, as well as small colleges, are working to improve the quality and pertinence of their library instruction. College Library, UCLA, reports that the field of library instruction has been increasingly important to them in recent years, and that many of the other eighteen UCLA libraries also offer orientation-instruction programs. The University of Hawaii sent separate replies from its undergraduate collection and five other departments. Large institutions want to reach greater numbers; some are looking to new media to accomplish this purpose.

CURRENT INTEREST

The problems, the methods, the basic conclusions haven't changed much in two years–but the intensity of experimentation has increased. Seldom have I heard a librarian say, "We have given up all orientation." More typical is the remark, "We have tried *everything* and are not satisfied, but we are continuing." Eda Mason, Assistant Director for Public Service at the University of Denver Library, says, "Orientation is of foremost importance in our Reference Department discussions at the moment."

Rose Grace Faucher, Head of the Undergraduate Library at the University of Michigan, reports a similar situation: "Orientation is a constantly changing procedure here at the Undergraduate Library and it seems we try something new every year, in hopes we will hit on the one really successful form." There is widespread agreement that new keys are needed to open the doors into the complexities of modern libraries.

The strong current interest in library orientation and instruction programs is further evidenced in the fact that several conferences have been held in the past two years. Those at the Orchard Ridge Campus of Oakland Community College (Michigan) in June, 1969; at the University of California, Berkeley in July, 1970 (a workshop); and at

Eastern Michigan University in May, 1971,[1] have come to my attention. Harold Jones of College Library, Brooklyn College of The City University of New York reported that the New York Metropolitan Reference and Research Agency, Inc., held a series of meetings for librarians interested in discussing methods of instructing undergraduates in the use of the library and its resources.

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CURRENT CONCEPTS

The two major conclusions which run through both of the surveys I have made are (1) library instruction is effective only at the time of need and (2) learning to use a library is a continuing process. Typical comments are:

> Students and faculty want to know about the library when they need to use it.
>
> Virginia Phillips
> Coordinator of Reference Services
> University of Maryland

> What both teachers and students seem to appreciate most are lectures directed at specific research problems the class is working on and bibliographies of sources with call numbers noted. It seems to me that both students and faculty are motivated to listen to instruction and to ask for more when those two factors are an important part of any instructional session.
>
> Mary Jo Lynch
> Senior Reference Librarian
> University of Massachusetts

> We feel that library orientation is much more than just pointing out the card catalog, etc. It is a continuing process whereby a student and a faculty member receives information which he can use throughout his career.
>
> John Pennino
> Assistant Director of Libraries
> Polytechnic Institute of Brooklyn

> For any orientation program to be successful, I feel it has to be continuous and not a one-shot lecture. It must reflect the students' needs, and only with the cooperation of the faculty can this be done.
>
> Ronald G. Hirons
> Reference Librarian
> Hofstra University

NEW APPROACHES

In line with these concepts, much less is being done for freshmen during Orientation Week or in early fall than formerly. *Orientation* is

now mainly a welcome. *Instruction* comes later and is continuous. Library lessons are being given to freshmen *only* when they can be tied directly to term paper assignments. Advanced bibliographic, course-related lectures are being given to upperclassmen and graduate students in many subject fields, including the sciences and vocational subjects as well as education, English, and the social sciences. Such lectures are "tailored" to meet the needs of the class and are given when the students are motivated. At the University of Windsor, library bibliographers as well as reference librarians give lectures.

Most libraries comply with requests for lectures. In addition, librarians are taking initiative in contacting faculty and publicizing the services they are prepared to offer. There is growing recognition of the fact that librarians need to increase their efforts in public relations in order to meet the needs of their patrons.

Tours, lecture tours, and credit courses continue to be given, but with "mixed feelings." Opinions regarding tours range from "no deadly tour" and "discouraged" to the conviction that it is important to get new students into the library building. Reactions to credit courses range from utter discouragement (because of student disinterest) and even resentment to strong recommendations submitted to curriculum committees.

A growing trend of importance is the effort to involve students to a greater extent in planning programs and in giving service: students on committees, better-trained student assistants, student bibliographic assistants and reference fellows, library liaison agents in dormitories.

USE OF MEDIA

Tours, lectures, and courses have a personal element that can seldom, if ever, be equalled by any mechanical media. But in the attempt to reach larger numbers of students programs for use with various media are being developed. The two most popular approaches are (1) colored slides with synchronized tape for use in classrooms with or without the presence of a librarian and (2) both printed and mechanically reproduced materials for use by individuals on location when they need help.

Closed-circuit television would seem to be an obvious solution to the problem of reaching large numbers, and has been used successfully. But many schools lack the sophisticated studio and campus facilities and graphic talent needed to produce and reproduce effective programs. Even when successful programs have been achieved, they have become outdated and mechanically worn out after several years of use, and have sometimes been discontinued in favor of other media. However,

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several schools in this survey report current use of television.

The self-guided tour is becoming popular. It ranges from mimeographed copy through attractive printed brochures to cassette tape. Programmed materials in print and for use with teaching machines are in use in several college libraries. These materials are in line with the philosophy that an individual should find help available when and where he needs it. This approach is the most promising; several librarians have voiced the opinion that we must come to this method. Ruth Johnson of Oral Roberts University says, "Our 'do-it-yourself' program seems to be developing independent library users." James Davis of the College Library of UCLA says, "Self-paced and self-directed programs are highly successful. Formal tours and classes are highly unsuccessful." The University of Illinois looks forward to using the PLATO system for orientation eventually when the campus is blanketed with enough terminals to provide individual instruction in dormitories or other campus units.

RESEARCH

No respondent in this survey reported structured research on the effectiveness of library orientation and instruction programs, other than theses and dissertations. Only a few report any testing. Again quoting James Davis of UCLA, this time in reference to a two-unit course given to high potential students:

> An independent evaluation committee tested students in the High Potential Program in all required courses. 80% of the students exceeded the expectant criteria level in Library Skills. The other subjects tested all fell below 35%. The evaluators recommended our methodology to the other departments.

Others have found that students who have had library instruction score higher on a library test than do those students who have not had any instruction. But the question remains: Are test scores a valid measure of a student's ability to search the literature for a specific purpose?

Encouraging comments on feedback sheets, letters of appreciation from faculty, heavier and more sophisticated use of materials, and fewer directional and elementary questions support the many efforts to help students learn to use libraries efficiently. Vonna Brown of El Camino College says:

> If there are students or instructors who have been disappointed, they have spared our feelings and remained non-committal; some participants are enthusiastic and express gratitude for "a much-needed service."

> Instructors who ask for orientation classes regularly with each new semester out-number the one-time-only requestors.

The Orientation Fact-Finding Committee of the University of California at Irvine writes:

> We have found that even when programs offered have not been well-attended, verbal response of the participants has been satisfactory. Students receiving library instruction have expressed favorable reactions to the content of programs. Their opinions and similar ones expressed daily at the Reference Desk by students being introduced to library resources leave no doubts that a real need exists at Irvine for some kind of systematic instruction in library use.

Even though such comments and experiences are convincing, it is gratifying to note (1) an announcement by the Council on Library Resources that John Lubans, Jr., Assistant Director for Public Services, University of Colorado Libraries, has been awarded a fellowship "to continue studying patterns of academic library use and non-use and the effect library orientation and library-use instructions presentations have and could have on these"; (2) that a survey of library orientation for graduate students is in progress at the University of Wisconsin Library School; and (3) the development of several programs under grants.

NEEDS

The needs in this area seem obvious even without the substantiation of a large body of research: (1) provisions for both individual and group instruction at the time of need; (2) media programs for both individuals and large numbers of students; (3) materials which can be shared; (4) a clearing-house for information about current programs and available materials. My surveys substantiate the opinions that library instruction is needed now more than ever before and that there is keen interest in finding new ways of meeting the needs of today's students. There will never be one master key to methods of library orientation and instruction, but various keys can be developed and tried until those that open the local doors most efficiently are found.

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1. Proceedings to be published by Eastern Michigan University.

Appendix I

QUESTIONNAIRE FOR SURVEY ON CURRENT LIBRARY ORIENTATION/ INSTRUCTION PROGRAMS (March 1971)

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Your answers to the following questions in so far as they apply to your program, and any further information and comments, will be greatly appreciated for a summary on the *status quo* of library orientation/instruction to be written for the *Drexel Library Quarterly*.

1. What METHODS and PROGRAMS (tours, lectures, etc.) are you now using?
2. To what GRADE LEVELS do you give orientation/instruction? Freshman ___ Soph. ___ Jr. ___ Sr. ___ Grad. ___ Special ___
3. To what SUBJECT AREAS do you give instruction?
4. Is your instruction (REQUIRED - OPTIONAL)?
5. Approximately HOW MANY_____ and/or what PERCENT _____ of your student body does your orientation/instruction reach?
6. What MEDIA do you use?
7. What MATERIALS have you developed?
8. How do you PUBLICIZE your program?
9. Do you have any definite EVIDENCE OF SUCCESS OR FAILURE of a specific program?
10. Have you conducted any STUDIES or RESEARCH concerning library instruction?

11,12. Do you have any suggestions on how to MOTIVATE STUDENTS? FACULTY?

13. What is done to ACQUAINT FACULTY with library resources and services?

14. What other programs do you plan to develop in the FUTURE?

Appendix II

NUMBER OF COLLEGES AND UNIVERSITIES RESPONDING TO QUESTIONNAIRE

Large Junior and Community Colleges	10
Enrollments up to 2,000	14
Enrollments of 2,000 - 10,000	14
Enrollments of 10,000 - 15,000	9
Undergraduate Libraries	9
Enrollments over 15,000	20
Number of replies used in this survey	76[a]
Replies received but too brief to be included	5
Total number of replies received	81
Total number of questionnaires sent out	107

[a] The seventy-six replies represent seventy-four colleges and universities. Ohio State University and the University of Hawaii are reported both under "Undergraduate Libraries" and "Enrollments over 15,000"; i.e., they have programs in both undergraduate and graduate libraries.

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Appendix III

INSTRUCTIONAL METHODS AND MATERIALS NOTED IN REPORTS FROM 76 LIBRARIES

Tours		50
Conducted tours	40	
Self-guided tours[a]	10	
Printed 6		
Cassettes 4		
Lectures to Classes		59
Non-print Media		
For groups:		
Slide/tape presentations		25
Slides		16
Tapes and cassettes		7
Television[b]		15
Current use	5	
Discontinued at present	6	
Planning to use	4	
Filmstrips		6
Films		8
Multi-screen presentations[c]		2
For individual use:		
Slide/tape		4
Group presentations may be used by individuals		
Cassettes - See Self-Guided Tours above		
Filmstrips		2
Audiscan[d]		1
Touchstone Access Carrel[e]		1
Programmed machines[f]		1
Planning to develop some kind of A-V presentations[g]		11
Printed Media		
Subject bibliographies		24
Student handbooks		21

Faculty handbooks
Faculty or Faculty-Graduate handbooks
Miscellaneous handouts
Programmed instruction[h]
Programmed kits[i]
Self-instruction brochures

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a. Self-guided tours:

Printed

Arizona State University
California, University of, L.A.
Northern Illinois University
Pasadena City College
Southern Illinois University – Edwardsville

Cassettes

Brigham Young University
California State University at L.A.
Delaware, University of
Southeast Missouri State College

b. Television

Current Use

Arizona State University
Illinois State University
Northern Illinois University (film)
Oral Roberts University (film)
Windsor, University of (film)

Discontinued at present

Brooklyn College of the City of New York
California State College at L.A.
Illinois, University of
Stephens College
Temple Buell College
Windsor, University of (lessons)

Planning

Denver, University of
Iowa Wesleyan College
Pasadena City College
Temple Buell College

c. Multi-media screen presentations:
Mount San Antonio College and St. Petersburg Junior College

d. AUDISCAN: Miami-Dade Junior College – North Campus

e. Touchstone Access Carrel: Dallas Baptist College

f. Programmed machines: Mount San Antonio College

g. Planning individual use presentations:

Arizona State University
Boise State College
California, University of, L.A.
California State College at L.A.
Denver, University of
Hawaii, University of
Illinois, University of
Northern Illinois University
Southeast Missouri State College
Stout State University
Western Michigan University

h. Printed programmed instruction: Georgia State College and Stout State University (Also University of Colorado)

i. Programmed kits: Oral Roberts University

Appendix IV

OUTSTANDING FEATURES OF INSTRUCTIONAL PROGRAMS AND FUTURE PLANS NOTED IN REPORTS FROM 76 LIBRARIES

Note: The compiler has grouped the colleges and universities responding into six groups, taking enrollment figures from *Accredited Institutions Of Higher Education, 1969-70* (American Council on Education).

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LARGE JUNIOR AND COMMUNITY COLLEGES
N = 10

INSTITUTION	OUTSTANDING FEATURES	FUTURE PLANS
South:		
El Centro Junior College	Synchronized SLIDE/TAPE for general orientation to the Learning Resources Center. COMMERCIAL FILM to teach indexes. LECTURES on materials for research papers and by request.	A library orientation on film or videotape to be checked out for showing to classes.
Miami Dade Junior College - North Campus	4 SLIDE/TAPES on research, which may be used IN CLASS or INDIVIDUALLY on AUDISCAN, and a SLIDE UNIT for freshmen.	More mini-programs on slide/tape More "coffees."
St. Petersburg Junior College	LIVE LECTURE with AV presentation: All English Comp. & Reading classes, vocational classes. MULTI SCREENS.	New slides and new presentation techniques from time to time.
Tarrant County Junior College-South Campus	A "packaged" approach: a SLIDE/TAPE presentation with a WORKBOOK; individual proceeds at his own rate, using the slides for reinforcement. Workbook includes list of reference books and glossary. Use by classes en masse or individuals. STUDENT APPROVAL overwhelmingly impressive.	Hope to market the program.

West:		
American River College	SLIDE/TAPE program in classrooms.	Slides for specialized programs.
De Anza College	3 SLIDE/SYNCHRO TAPE programs: (1) Tour and services (6 min.); (2) General orientation; (3) Use of divided card catalog (12 min.)	More programmed instruction in subject areas.
El Camino College	HANDBOOK, "tailored" LECTURES to any course plus SLIDE/TAPE (80 slides; 17 min.)	No plans reported.
Mount San Antonio College	3 meetings with ALL NEW students each semester: (1) THREE SCREEN, THREE PROJECTOR SLIDE/SOUND on physical facilities and library staff; (2,3) VISUAL presentation on R.G. and Subject Catalog. Some WORK-SHEETS and TESTS. REQUIRED, but no credit. INDIVIDUAL PROGRAMMED MACHINES as follow-up. CLASSES encouraged to come to library.	No plans reported.
Orange Coast Junior College	LECTURES in a library orientation room.	Video presentation, using slides. Units for individual use.
Midwest:		
Florissant Valley Community College	TOURS, LECTURES, SLIDES, ETC.	No specific plans.

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ENROLLMENTS UP TO 2,000
N = 14

INSTITUTION	OUTSTANDING FEATURES	FUTURE PLANS
East:		
Hampshire College	Classroom lectures. Personal instruction by trained STUDENT REFERENCE ASSISTANTS. Modular, annotated, course-specific BIBLIOGRAPHIES.	The library to be the nerve center of the campus, connected electronically with many points. Student reference assistants to be available in dormitories.
North Shore Community College	One lecture to each FRESHMAN ENGLISH class. 2-page assignment.	Shorter lecture, with a film. Assignment to be tied to research paper.
Roberts Wesleyan College	TEST on indexes and card catalog, with FOLLOW-UP for individuals (effective). Orientation session for NEW FACULTY.	Senior colloquium to include library instruction especially slanted toward graduate students.
South:		
Dillard University	TRAINED BIBLIOGRAPHIC ASSISTANTS.	Expand library -- college concept.
Dallas Baptist College	VIDEO and AUDIO presentation, "Let Your Fingers Do the Walking" evolved around the English research unit. TOUR of new Learning Center for both faculty and students.	Further work on instruction units.

Florida Presbyterian College	Library Orientation in required CORE classes. PROBLEMS.	Plan to have a section in the faculty handbook.
Midwest:		
Beloit College	QUESTION-ANSWER SESSIONS to small groups of freshmen in fall. LECTURES to classes encouraged.	Train student assistants thoroughly.
Earlham College	LECTURES and BIBLIOGRAPHIES for specific subjects and topics.	No plans reported.
Indiana Institute of Technology	ENGLISH CLASSES by request. SLIDES on facilities, card catalog, ENGINEERING INDEX and APPLIED SCIENCE and TECHNOLOGY INDEX.	Interested in programmed learning or other individualized instruction.
Iowa Wesleyan College	LECTURES geared to classes. SLIDES. WORKSHOP for NEW FACULTY.	A video tape presentation and cassette tapes.
Oral Roberts University	TOURS including a RESPONSE SHEET and PROCUREMENT of a book. PRE-TEST. Follow-up via lectures, slides, tapes, video-tapes. Five PROGRAMMER KITS and two VIDEO-TAPES on basic instruction; two KITS for freshman English.	As requested and as time permits.

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Stephens College	In second semester FRESHMAN ENGLISH in conjunction with term paper. 1/3: assignment on reference books; 1/3: lecture on a research subject. TELEVISION used less now than formerly. "Listing of LIBRARY EXPERIENCES Recommended for Freshman English Students."	No plans reported.
Wabash College	FRESHMAN SEMINAR PROGRAM WORKSHOP for senior assistants. INDIVIDUAL help.	"Library Rap" with freshmen. Development of multi-media programs. Develop a library "awareness."
Temple Buell College	Teachers College TEST given in fail testing program for diagnostic purposes. OPEN HOUSE for new students. Use of FILMSTRIPS.	Hope to develop a TV presentation.

ENROLLMENTS OF 2,000 -- 10,000
N = 14

INSTITUTION	OUTSTANDING FEATURES	FUTURE PLANS
East:		
Brown University (R.I.)	REFEREN FELLOW PROGRAM. Series of GUIDES and BIBLIOGRAPHIES. TOURS for groups and individuals.	More structured, formalized approach.

Maryland, Univ. of – Baltimore Campus	MINI-COURSE in January. Optional, well-received, but lack staff. BOOK MARKS with catchy poems and policies. A FACT A DAY posted.	Eye-catching aids for card catalog, etc. Bibliographic instruction to individuals and classes upon request. Tape information system for the index tables, the card catalog, and the stack areas.
Polytechnic Institute of Brooklyn	CLASSROOM LECTURES. SLIDES, but rely on pertinent oral information rather than on media presentations.	Hope to have subject programs for each of the disciplines offered.
South:		
Duke University	Orientation SLIDE LECTURES. Burden of one-hour course under auspices of Department of Religion.	Interdisciplinary course. Mini-class sessions in library by reference librarians in different disciplines; e.g., one hour in history. Send letters and handbooks to both freshmen and graduate students. Develop a self-tour sheet.
Winthrop College	LECTURE combining SLIDES of the library with TRANSPARENCIES of major reference tools related to one selected controversial title; e.g., *Catcher in the Rye*.	No plans reported.

Midwest:		
Kansas State College of Pittsburg	Lectures followed by ASSIGNMENTS given by FACULTY. TOUR for NEW FACULTY.	Short, non-required course.
Northeastern Illinois State College	LECTURES to EDUCATION classes, primarily.	Audio-visual program in the new library.
S.E. Missouri State College	SUMMER ORIENTATION. One hour, one credit elective COURSE. CLASSES TO LIBRARY with or without faculty. INDIVIDUAL INSTRUCTION at the point of need. Instruction, with grades, to freshman English discontinued.	Guided tour on cassette tape. Departmental staff meetings in library.
Stout State University	PROGRAMMED INSTRUCTION, SLIDE/TAPE LECTURES. Evening presentation to NEW FACULTY as part of the Learning Resources In-Service Program.	Simulated Literature Search for Master's degree candidates. Slide series for individual use.
Windsor, Univ. of	7 week COURSE required of all freshmen. New closed-circuit TV FILM of the new library extension. 6 week non-credit COURSE for German majors with lectures by Germanic faculty and the Library Bibliographer for Germanic and Slavic Studies.	Further revision to be considered by the new teacher librarian.

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Boise State College	SLIDE/TAPE program, LECTURES, TOURS.	Considering self-instruction slide-tape unit for use by either individuals or classes.
Denver, Univ. of	TOURS for new students and to individuals. LECTURES to classes upon request.	Considering media-presented library orientation video cassette tapes, individually operated film and slide presentations. Exploring computer programs, possibly using cathode ray tube presentations.
Hilo College - Hawaii	TOURS for freshmen English and by request; LECTURES upon request.	Hope to offer a credit course in Introductory Library Studies.
Southern Colorado State College	TOURS and LECTURES to classes. Effective program with English instructors.	More contacts and offering of services to faculty. Develop tapes on card catalog, indexes, reference books.

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ENROLLMENTS OF 10,000 - 15,000
N = 9

INSTITUTION	OUTSTANDING FEATURES	FUTURE PLANS
East:		
Delaware, Univ. of	INDIVIDUAL CASSETTE TAPE TOUR. Two sessions of instruction given to FRESHMAN ENGLISH. VIDEO TAPE presentation on card catalog, *Readers' Guide*, and other indexes. QUIZ on the tour, ASSIGNMENT and TEST. Tests graded by computer and analyzed by a specialist. SELF-GUIDED WALKING TOUR for biology students.	No plans reported.
Hofstra University	LECTURE to science MAJORS.	Subject lectures to all majors, in small groups.
South:		
Georgia State Univ.	*Programmed Text on the Use of the Library* in orientation packet for new students. Required test discontinued. ENGLISH DEPT. covers the text and may give the test.	No plans reported.
Univ. of South Florida	LECTURES by 6 professionals, scheduled on a monthly chart. Most effective for upperclassmen and graduates. Largest number of requests from Business and Education.	No plans reported.

Midwest:		
Miami Univ. (Ohio)	6 experimental sections of ADVANCED FRESHMAN ENGLISH in May, using SLIDE/TAPE and LECTURE.	Expand freshman English program in fall if spring response justifies, and plan for instruction to advanced levels.
Northern Iowa University	ONE-CREDIT COURSE given by Library Science Dept. Open to entire university. Lessons presented entirely via SLIDES with SYNCHRONIZED TAPE.	No plans reported.
Southern Illinois University-Edwardsville	Series of 3 SLIDE/TAPE PRESENTATIONS to freshman and sophomore General Studies. BIBLIOGRAPHIC LECTURES to upperclass and graduate classes, mainly Education, Psychology, and English by Instruction Librarian. Some lectures to other fields by other librarians. Extensive BIBLIOGRAPHIES.	Develop more bibliographies and lectures. Work out Self-Instruction lessons at points-of-use.
West:		
University of California - Irvine	TOURS, LECTURES in the library. Orientation for INDIVIDUAL STUDENTS upon request. "The Library Game" - a series of instructional sessions. TV loop in color on periodicals, shown at the Reference Desk, but mechanical difficulties encountered.	A credit course recommended. Advanced bibliographic instruction to be continued. Student participation in planning programs.

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Pasadena City College	Two ONE-CREDIT COURSES. LECTURES to classes by request. SELF-INSTRUCTIONAL BROCHURES.	Video-taped orientation lessons.

LARGE UNIVERSITIES - UNDERGRADUATE LIBRARIES
N = 9

INSTITUTION	OUTSTANDING FEATURES	FUTURE PLANS
East:		
Pennsylvania State University	TOURS: Voluntary at scheduled times; arranged for classes; to individuals upon demand. SOLUTION SESSIONS: individual instruction for term papers. CLASSROOM instruction upon demand (new program). Formal Library Science survey COURSE for credit. An EXHIBIT depicting search strategies.	Taped instructions with guide books in Listening Learning Centers in all Undergraduate Libraries. Cassettes for home use. Library instruction in study skills courses.
South:		
Florida State University	SLIDE/TAPE program for general orientation and for the one-hour CREDIT CLASSES.	Hope to make the course required for all students within the first three quarters of their college program. Assignments and tests.

North Carolina, Univ. of	Instruction to INTERESTED STUDENTS on OPTIONAL basis in April.	No plans yet.
Texas, Univ. of (Austin)	TOURS, LECTURES, INDIVIDUAL INSTRUCTION as required. All levels in SPECIAL CLASSES, e.g. study skills, foreign students.	No immediate plans, but much interested.
Midwest:		
Illinois, Univ. of	TV now outdated because of the new Undergraduate Library.	Planning individual machine instruction; two units: general overall view of the UG library and how to use it; specific materials. Eventually planning to use the PLATO system for orientation, with terminals in dorms, etc.
Michigan, Univ. of	Summer TOURS: positive attitude; successful. SLIDE program for absentees. VOLUNTARY-ATTENDANCE BIBLIOGRAPHIC TALKS; problem solving approach. LIBRARY RESOURCES DAY every Thursday during fall and winter, a librarian on duty to work in depth with any student.	Librarian available in the reference area in conjunction with the slide talks. Coordinate services with summer institute, etc. Develop faculty orientation.

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Ohio State University	Summer WALK THROUGH; one-half of freshmen. LECTURES to classes upon request of faculty, in both UG and Regional Campus Libraries.	Similar program in West Campus Learning Resources Center. Computer assisted instruction course. Modules of information: (1) catalog, (2) overview of the system and locations; (3) indexes. Programmed instruction by computer dialogue with instructions leading to performance. A slide carousel will accompany the module on locations.
West:		
California, University of, Los Angeles	Scheduled TOURS; SELF-GUIDED TOURS. Accredited two unit COURSE in Library Skills for High Potential students.	Self-paced, self-directed experimental accredited program for incoming Englsh majors, etc.
Hawaii, Univ. of	TOURS. CLASS and INDIVIDUAL instruction. Brochures.	Filmstrips at points of use. A credit course in reference materials. Better campus publicity.

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COLLEGES AND UNIVERSITIES OF ENROLLMENT OVER 15,000
N = 20

INSTITUTION	OUTSTANDING FEATURES	FUTURE PLANS
East:		
Brooklyn College of the City University of New York	Have discontinued an extensive program to Freshman English. Now INTRODUCTORY LECTURE upon request; also subject lectures. TOURS by appointment.	Elective one-credit course.
Maryland, Univ. of	Summer TOUR to all freshmen. SUBJECT LECTURES. PACKETS for NEW FACULTY.	No plans reported.
Massachusetts, University of	SLIDE/TAPE program to each COUNSELING SESSION. TOURS: walking and by request, including to new foreign students.	No plans reported.
Pittsburgh, Univ. of	TOURS, LECTURES. TERM PAPER CLINIC.	More slide/tape programs in various areas and for individual use.
Temple University	TOURS. LECTURES, including two graduate students on a voluntary basis.	No plans reported.
South:		
Houston, Univ. of	SELF-GUIDED TOURS in various libraries. LECTURES, mostly upper-level and graduate.	No plans reported.

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Midwest:		
Eastern Michigan University	One or more LESSONS to freshman English and other courses in which term papers are required. Instruction ADAPTED TO TOPICS CHOSEN BY THE STUDENTS. Instruction librarians take the INITIATIVE in contacting faculty. Subject lectures given by department librarians also.	Five-year outreach program under a grant.
Illinois State University	SLIDES, followed by a short TEST on "features of the library" during summer orientation. FOLLOW-UP in fall: four TV tapes - (1) general; (2) catalog; (3) indexes; (4) reference books. PERSONALIZED TOURS by Reference Department upon request.	Up-date and redo the TV tapes. Plan further means of reaching large groups.
Indiana, Univ. of	TOURS (one hour). SEMESTER PROGRAM (for credit), one for Freshman-Sophomores, one for upper classmen; graduate courses by subject specialists (a success).	No plans reported.
Missouri, Univ. of	SLIDE/TAPE TOUR for freshmen. SEMINARS and WORKSHOPS for Education, Psychology, Physical Education, Testing and Counseling.	No plans reported.

Northern Ill. Univ.	WELCOME sheet in freshman packets. VOLUNTARY ATTENDANCE CLASSES at the beginning of each semester and the summer term. CLASSES BY REQUEST to several departments. Printed, two-color SELF-GUIDED TOUR. SLIDE/TAPE and FILM-STRIP presentations for classes.	Ten minute instruction TV welcome for freshmen. More slide/tape and filmstrip presentations for use by classes and for point-of-use by individuals.
Ohio State Univ.	LECTURES on library resources in specific subject fields to graduate and junior-senior courses at the request of faculty. INDIVIDUAL ORIENTATION in subject fields in CONFERENCES with graduate students by appointment with the CONSULTANT FOR LIBRARY RESEARCH AND LECTURER IN BIBLIOGRAPHY, who also gives most of the lectures.	No plans reported.
Purdue University	SLIDES followed by tour. LECTURES by department librarians.	No plans reported.
Western Michigan University	MULTI-MEDIA presentations. INDIVIDUALIZED approach. SMALL GROUP tours.	To develop self-instructional programs for the card catalog, indexes, etc.

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West:		
Arizona State University	SELF-GUIDED TOURS. GUIDES to the Library. CLASSES by request.	To develop a library laboratory with individualized instruction using AV materials, programmed learning, individual projects.
Brigham Young University	CASSETTE TAPE WALKING TOUR. TAPE INSTRUCTION on card catalog, required in Freshman English, Pre- and post-TEST.	Additional tapes and perhaps a videotape.
California State College at Los Angeles	Extensive TV program discontinued. CLASS TOURS and LECTURES. Library Laboratory Assignment. Library TUTORIALS. ASSIGNMENTS for classes.	Library Handbook. Self-guided tour. Demonstration on a particular topic. Library Laboratory. Workshop or clinic.
Hawaii, Univ. of	WALKING TOURS. SEMINARS. CLASSES.	Orientation program for East/West Grantees, beginning with a questionnaire. A more formalized approach for graduate students. Audio-visual presentations, especially on the use of indexing and abstracting services.

San Jose State College	Orientation. TOURS, first two weeks every semester.	No plans reported.
Washington, Univ. of	SLIDE/TAPE LECTURE. RESOURCES LECTURE. PHYSICAL TOURS. PUBLICATIONS.	To develop short film-tape loops for continuous programs. Two three-minute audio lectures on reference tools. Study kits for freshmen.

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Library Instruction at Southern Illinois University, Edwardsville

by Millicent C. Palmer

To acquire a suitable perspective from which to view a case study of a single library instruction program, one should first observe the professional status of this entire movement. Teaching, in the varied forms required of a full-time library instruction librarian, is a function to which library science and the library profession as a whole, has given little attention. Indeed, the curriculum of library schools shows no evidence of either sanction or support. Those librarians who have been asked to develop programs are functioning as professional mavericks or orphans, or both.

Library instruction in some limited form has been carried out in many universities by reference librarians for whom it is an added and often unwelcome task; but library literature is strewn with the dried bones of effort that died "a-bornin'." Therefore, persons who dare assume the title, "Library Instruction Librarian," do so at their own risk. The only supportive influence is the fact that their administrators are aware of need and have faith in the possibility of solving old problems in new ways.

The program at Southern Illinois University, Edwardsville Campus, was initiated in the fall of 1965, when the first two buildings of the new campus were ready for occupancy. In December of that same year, I attended the New York ALA Pre-conference on Library Instruction and came away feeling that I had joined a sub-profession characterized by failure and skepticism. Although I soon learned to build upon the philosophic foundations created by Knapp in the Monteith College

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experiment, it was apparent that I must develop my own specific objectives and methods by trial and error.[1] But at least it would be full-time trial and error. When discouraged, or faced with failures, I could not retreat into other responsibilities and blame faculty or students for being unappreciative.

Now in its sixth year, the present library instruction program bears little resemblance to its beginnings; nor does the Edwardsville Campus, which has grown from a 1965 enrollment of 7,146 to a 1971 enrollment of 13,700. Operating within the framework of a quarter system and on a twelve month contract, I have had twenty-one opportunities for new beginnings, and each one has taught me more of the sometimes brutal facts about library instruction.

The purpose of this paper is *not* to describe a model program. As far as I can determine there is no model program anywhere, yet. My purpose is to share with those who have similar responsibilities some things that we have learned, mistakes we have made, unexpected problems we have faced, our analysis of some of these problems, ways in which we are trying to solve them, and plans for further solutions. Since I have had the almost unparalleled opportunity, due to the vision of my directors, John Abbott and Ralph McCoy, to devote full effort to this work, it is hoped that my experiences may provide some foundation for others, possibly making it unnecessary for them to follow all the dead-end trails which I have already rather fully explored.

Although my method was basically trial and error, rather than elaborate grant-supported experimentation, it has not been *blind*, intuitive trial and error. With the interested help of faculty in whose classes my instruction was given, there has been quarterly feed-back from many classes, sometimes by informal questionnaires, more often by open-end critiques. Any library instruction librarian who hasn't asked undergraduates to be critical doesn't yet know the full meaning of "bloody but unbowed." Each group of critiques was sorted into three piles: (1) those which said, "Perfect! I don't see how it could be improved," (2) those which said, "It was a complete waste of time," and (3) those which described both plus and minus values. The first two piles were very small, and I laid them aside as equally invalid guides for revision of the lecture. The third pile, which represented majority opinions, was full of pluses and minuses. The minuses received careful attention. If a significant number agreed, my plans for next quarter began to take shape. Essentially, my method has been to ask for criticism, evaluate and act upon it, if it seemed valid and feasible. Although faculty suggestions were asked and valued, student evaluations were most needed. Sometimes evaluations were made immediately after

a lecture and again when the library assignments were completed. Sometimes there were evaluations in successive quarters of the same course, in order to test the changes that had been made.

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THE GHOST OF LIBRARY INSTRUCTION PAST

Surveys of library instruction programs leave no doubt of the fact that a majority of them focus most, if not all, of their attention upon freshmen, and therein lies the greatest single problem that I have encountered in developing an instruction program that attempts to provide bibliographic knowledge at later academic levels.[2] The image of library instruction as a single massive inoculation of freshmen against all further needs for information-search knowledge, appears to consciously or subconsciously condition the thinking of most faculty and students. I was quite unprepared for this attitude, and it was only after several quarters of trying to "sell" a different kind of program that I came to accept this as a basic fact with which an instruction program must somehow find a way to cope.

Providing new solutions to *old* problems has many disadvantages. Each quarter it became clearer to me that before I could gain faculty or student acceptance of what I was attempting, I must first do battle with old concepts and myths for which our own profession must take the blame. And this battle must be fought over again with each new faculty member and each new college generation. In short, although battles may be won, the war against bibliographic ignorance appears to be endless. It is understandable that librarians for whom instruction is an *added* responsibility often throw in the sponge.

In the first two years of my program, I seldom entered a classroom to give specialized resource-search instruction without having at least one student say (while others gave silent but visible affirmation), "I've already heard the library lecture!" Frequently I would find attendance decimated with full approval of the instructor. "They said they had already heard the library lecture, so I told them they needn't come." Then I knew that my first teaching function was with faculty members, not students. All lecture scheduling would have to be preceded by careful communication with the teachers involved. For even when the sophistication level of instruction had been discussed in advance, and a copy of the bibliography placed in their hands, many teachers announced my scheduled lecture as a talk on "How to Use the Library." An intelligent student who had passed his first quarter in college would do well to absent himself from such a lecture. After repeated experiences of this kind, I concluded that neither faculty nor

student should be blamed for these misconceptions. They were clearly products of librarianship's own making, and instruction programs must make a frontal assault upon them.

Inherent in the public concept of "a" library lecture which solves all information-search needs for all times is the vague but persistent notion that general library instruction (card catalog search techniques, a few basic indexes, and a selection of scattered reference books) will make a student competent to conduct effective search procedures in all subject areas. Any skillful subject librarian could testify to the fallacy in this concept. Even in the library profession we find ourselves embarrassingly inadequate when conducting extensive information searches in more than a few subject areas.

At the roots of these misconceptions concerning the adequacy of generalized freshman level instruction is what I call the Myth of the Card Catalog. In response to offers of bibliographic instruction at post-freshmen level, many faculty members demurred, "Oh, I think my students know how to use the card catalog." It has been necessary to conduct a continual campaign of card catalog demythologizing, first with the faculty, and then with students. Of all the incapabilities of the card catalog, one of the most unrecognized (or unpublicized) is its inability to show, explain, and relate to one another the vital bibliographic and reference systems that continue to develop in each subject area. These are what provide the most useful techniques for resource identification and retrieval.

The persistent Myth of the Card Catalog is, I believe, a product of our past instruction emphasis, an emphasis that may have been relatively valid in the day of "The Book," before the literature of journals, reports, government publications, conference proceedings, and unpublished resources made the difference between informed and uninformed scholars and students.

After several quarters of learning experiences concerning faculty and student attitudes toward the need for sophisticated library resource retrieval knowledge, I was no longer surprised at my first quarter discovery that the academic community had not been waiting with bated breath for the arrival of an instruction librarian. A meaningful instruction program must be explained, justified, and sold--which is indeed full-time work.

FRESHMAN INSTRUCTION: TOO MUCH TOO SOON

It seemed logical to begin at the beginning--with the freshmen. Two quarters of English Composition were required in the freshman year. A

English Composition Committee coordinated the instruction, and it was with the chairman of this committee that I had my first faculty conference. He was knowledgeably receptive, guided me through the academic labyrinth, officially announced my service to English Composition faculty, and asked me to introduce my plans in the opening Humanities Division faculty meeting. Because of his encouragement and constructive criticism, I frequently returned to him for advice in the early years of the constantly changing program.

The literature content of the second quarter of English Composition was drama, so it followed that the subject of the inevitable term paper was also drama. Of all possible subjects it is one of the most difficult for freshmen, since it involves the use of literary criticism of individual plays. It seemed advisable not to thrust them into this difficult library search assignment without some previous elementary knowledge of the library. So two instruction lectures were prepared for use in English Composition. In the first quarter, following to an unfortunate degree the pattern of conventional freshman instruction, a "general" lecture was presented in each of the sixty fall-quarter sections. Color slides from an old instruction series were combined with overhead transparencies to make up a forty-five-minute lecture that attempted to provide a motivational framework, an overview of basic resources and locations, a five-minute unit on the card catalog, a brief look at the pattern of the Library of Congress Classification, and a quick photographic view of some periodical indexes. Audiovisual faculty coached me in my first experience with combining carousel slide and overhead projectors, and I provided the commentary. In the first three years of the programs, our classes were scattered in three "teaching centers"—two being fifteen and twenty miles (in opposite directions) from the new central campus at Edwardsville, and the general lecture had to be adapted to each.

For the second quarter English Composition course, I experimented with a variety of approaches to the drama information problem. Color transparencies were used throughout the classroom lecture, and a bibliography was dispensed to each student. Faculty suggestions and criticism were encouraged, but the most significant and discouraging critiques came from the students in questionnaires checked at the end of the first year of this instruction. It was evident that only a small number of the sources discussed were actually used for the preparation of the paper. The process of self-criticism once more went to work!

Meanwhile, Introduction to Poetry, another 100-level English course included in our General Studies program, called for help, and I

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prepared a bibliography and an illustrated lecture, which was offered to every teacher and used consistently by a few. I didn't need student critiques to tell me that this lecture was a mistake. Because the course was usually taken after the second quarter of English Composition, and because it of necessity repeated some of the sources in that instruction, class response was openly apathetic. After a few quarters I discouraged the use of the lecture, but continued to offer the bibliography as a substitute.

Another 100-level required course, Oral Communication (Speech), was in obvious need of resource guidance, and for this I prepared a bibliography and an illustrated lecture on sources of information on current problems. Again, for this I had the advice and suggestions of content-oriented speech teachers.

In the first year I gave an average of 66 hours of personal lectures per quarter (100 in the 1st quarter), with 90 percent of them given in freshmen level courses. Freshmen enter in all four quarters, but the largest influx is, of course, in the fall quarter. By the end of the second year of our program, upper-class lectures had increased to 37 percent of the total, but I was still spending as many as 65 hours a quarter in freshmen courses.

Why did I give so much attention to freshmen? Several reasons, all poor, but understandable. In the first place, it was expected. It fit the established concepts of library instruction, and because it did, it was relatively easy to get into freshmen classrooms. Many faculty members were all too eager, even when many of the resources presented in the instruction were not justified by the library resource demands of the course. "They ought to know these things! They'll use this knowledge sometime" was the argument given by the requesting teacher. Being eager to demonstrate my services, I said "yes" to every invitation.

By the second year, due to student feed-back, written, oral, planned and unplanned, I began to critically re-evaluate my freshmen services. But I had already created in the minds of one student-generation an image of library instruction that haunted my efforts at all upper levels until that student generation had graduated.

My second-year analysis of errors has by now been justified and verified. For the sake of all librarians who are planning library instruction programs, the hard facts about freshmen as subjects for instruction need to be stated bluntly:

1. Contrary to the expectations of both library and classroom faculty, freshmen are not good subjects for library instruction. Rather than blame the freshmen, we should look for reasons. The average

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reshman has just graduated from high school where he ranked in the upper percentile of his class. His library experience has been relatively simplistic and satisfactory, so he comes to us with little sense of need for more library knowledge. He should not be blamed for his ignorance of the tremendous difference between high school and university library resources. There is another factor: in an average university, including ours, the freshman curriculum consists largely of required courses, toward which he has minimal motivation. Library instruction, even when it zeroes in on the specific library needs of a course, is received at the same motivation level as the course itself.

2. The general library lecture in first quarter English Composition had fallen all too neatly into the old pattern of conventional library instruction which unintentionally implies library competence. That lecture rose to haunt me in each class I entered, "But I heard THE LIBRARY LECTURE!"

3. The second quarter instruction, to prepare them for an urgent need for drama sources, had overwhelmed them with too great a quantity of unfamiliar materials, some of which were of peripheral value.

4. I had assailed them at too many points in the curriculum. Lacking strong motivations and needs they felt sated and defensive.

5. So much time was being spent with freshmen that upper-level service was neglected.

Regardless of what classroom or library faculty know to be useful resource knowledge for freshmen, library instruction should, I believe, discipline itself to give to freshmen only the knowledge for which *they* can see an almost immediate need. The idea of "a" library lecture which dispenses all necessary knowledge must somehow be eliminated, if later specialized subject bibliography instruction is to be accepted; and the instruction librarian who hopes to be accepted at later levels must free himself in the mind of the student from association with any general instruction that remains necessary. Using these guidelines, our present freshman program came gradually into existence.

Quarter by quarter, as my time and student help permitted, I revised the freshman program to try to make it more realistically fit freshman motivations and needs. All classroom instruction was converted into color slides, synchronized with sound tape. The production of these programs was a difficult and time-consuming operation. Although I wrote the scripts and planned and supervised all graphics, the actual graphics production, photographic work, and final taping were all done by student workers, with some guidance from overburdened audiovisual professionals.

However, I believe that the product is well worth the expenditure of time and energy. It provides undermotivated students with a more interesting instruction package that better matches their multimedia expectations, and at the same time communicates more knowledge in less time. It is possible with this technique to show library locations, actual library materials, students in the library setting, and sample reproductions of the content and form of indexes and resources. Music bridges and backgrounds make them more palatable. Revisions in picture material are easily made.

The slide-tape production also permits flexibility in faculty scheduling and frees the instruction librarian from quantities of repetitions, thereby making it possible for him to give greater attention to the more urgent needs of the upperclass student. Because our Audiovisual Department includes Self-Instruction and Campus Services, the slide-tapes are available for individual use as well as for classroom showings. Perhaps most important, they provide a system which permits the instruction librarian to largely disassociate himself from the early level instruction in order that his appearance in more advanced classes may not so easily be equated with general instruction.

Our freshman-level instruction now provides the following:

1. "Lovejoy Library: a First Look," a 20-minute color-slide, synchronized sound production. The content is strictly limited to (a) physical arrangement of our three-level library which includes four subject libraries, (b) general concepts of varieties and quantities of resources, and (c) general patterns of physical arrangement of these resources. Music bridges are used and the narration is read by a senior who introduces himself as the guide for the visual tour of the Library.

This production is used before the summer and fall quarters as one unit of an all-day pre-orientation system sponsored by the Dean of Students Office. For freshman and transfers who enrolled in the 1970 fall quarter, this production was shown thirty-eight times. In our first two years of these pre-orientation sessions, we followed the slides with guided tours led by student volunteers, whom I attempted to train to give accurate tours. Even though the groups were kept as small as eight per guide we all had doubts about the value of the tours. Again—too much too soon! And there were complaints from library faculty that the information dispensed was not always either accurate or adequate. Finally, we offered the students a choice of a student-guided or self-guided tour for which we provided floor maps with suggested tour routes. Forty-five percent chose the self-guided tour, and on an evaluation check sheet turned in after the tour, 84 percent of these

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nswered "Yes" to the question, "Would you recommend the self-uided tour to other new students?" Tour guides, always enthusiastic nd capable volunteers, reluctantly decided that of the 55 percent who ill wanted guided tours, a large percent appeared to be disinterested or oo tired to show interest. Since then we have discontinued guided ours, but kept tour maps at the entrance to the library during the pening weeks of each quarter. Although a sign says, "Please return fter use," very few do, and the map box has to be refilled frequently.

Since there is never 100 percent attendance at pre-orientation, we rovide an all day makeup session early in the summer and fall uarters. Announcement of the session is given in English Composition lasses and those who attend fill out slips which are returned to their eachers.

In winter and spring quarters there is no general pre-orientation, so he production is shown in first quarter English Composition classes. Since it requires only twenty minutes of class time, faculty raise no complaints. In fact they are unanimously approving.

2. "Basic Library Mechanics Problems"

When "Lovejoy Library: a First Look" was ready for use, we began experimentation with a set of problems assigned through the first quarter English Composition classes, but written and graded by my office (which until last year consisted of two part-time student workers and me). The problems, we emphasized, were not tests, but experiences which involved: (a) basic mechanics unique to Lovejoy Library, such as a divided catalog, Book Location Guide, Special Location Symbols, and Periodical Holdings Catalog; and (b) basic mechanics common to all libraries: the finding and interpreting of catalog information for a book; and the finding and interpreting of information concerning a magazine article.

Each student selects his own subject, and each paper is hand-graded, with requests to redo one or both problems if serious misunderstanding is indicated. The information needed to correctly work the problems is either in the problems themselves or in the *Library Handbook*, which is cited throughout the problems. Each quarter, for two years, changes were made in the explanation of problems whenever a significant number of students failed to interpret the problems correctly. Cases of problem-copying have been negligible.

At the beginning of each quarter, a schedule for assigning problems is prepared and sent to the faculty, and reminders, accompanied by sets of problems and handbooks are delivered to appropriate mailboxes in the week preceding their assigned date. In the 1969-70 academic year

about 2,600 sets of problems were examined, commented upon and graded.

How have students and first quarter English Composition faculty reacted to this assignment? It was initiated with considerable trepidation, but the response was a happy surprise to all of us. Incognito, in quarters when I had not been introduced through pre-orientation, I was able to observe the students at work. Their attitudes were serious and there were no signs of its being regarded as irrelevant busywork. Of course, the fact that it is assigned by a grade-giving faculty member admittedly is a factor. Although we tried to provide motivation by relating it to immediate needs and to the upcoming term paper, I continued to be concerned about over-all freshman estimates. So in the 1970 fall quarter we asked first quarter English Composition faculty to administer an evaluation check sheet. From 542 returns, 80 percent indicated they found the experience worthwhile, with 53.8 percent finding it valuable, 19.3 percent quite valuable, and 7 percent very valuable. Only 16.2 percent found it unnecessary, but in the analysis of reasons for this estimate, 11 percent indicated that they had used Lovejoy Library while in high school, and 5.9 percent were not in their first quarter on campus.

3. "Drama Sources and the Art of Retrieval"

Two 35-minute color slide-sound productions were written, designed and created over a period of a year, to prepare second quarter English Composition students for their search for drama criticism. The first one was on book sources, including the use of the *Essay Index*. The second was on locating journal sources, with special attention to the difference between theater and literary criticism. Both productions emphasize search strategy, beginning with defining of subjects through a literary handbook. The English Composition Chairman read the narration, providing not only an excellent voice, but a special air of authority. A "Guide to Library Searching" was written to match the procedural steps in the slide productions, and short quizzes were designed to be administered immediately following each lesson.

The guides and quizzes (with answer sheets) are kept in the English Office for faculty to pick up when they are ready, and they now schedule the showings directly with AV Services. Some faculty use both lessons; some only the one on journal search. For better scheduling, two sets of the production are available. Letters are sent to all new English Composition faculty explaining the services, and reminders sent each quarter to "old hands."

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4. "Sources of Information on Current Problems"—a 40-minute color slide-sound production for use with Oral Communication classes (required Speech courses).

Emphasis is upon resources unlikely to be found through the card catalog, and unlikely to be familiar to freshmen students. Music background and a good masculine narrator give it at least a touch of professionalism. This production is motivational as well as instructional since good sources for speech content are not necessarily demanded by all speech teachers.

On the quarter system, Oral Communication faculty had found it difficult to give up a class period for the showing of the library resource lesson, so an out-of-class showing has been provided for the last two years. The Chairman of the Speech and Theater Department has consistently provided assistance in making this program available. Early each quarter we schedule an all day showing. He notifies the teachers, and my office follows up with faculty reminders, and for each student a memo which includes room-date-hour schedules and a concise, but emphatic, statement of the content of the production. Although they come on their own time, about two thirds of the enrollment attend each quarter.

Because this production covers sources of recent information on current problems, it has to be revised and the pictures updated at least once a year. But in the 1969-70 academic year over 1,700 students saw it, which makes the time worthwhile. An annotated bibliography is distributed at the showings, and the students are urged to take only mental notes.

INSTRUCTION FOR UNDERGRADUATE SUBJECT MAJORS: AREA OF GREATEST NEED AND GREATEST PROBLEM

Although an instruction program must somehow provide assistance for beginning students who have library resource needs created by their courses, I have come to believe that the most *vital* level for library instruction is in the sequences of courses designed for subject majors. Ironically, this is also the level at which acceptance and placement of the service is most difficult. During my six years of developing a program, reasons for the difficulties became increasingly clear:

1. This is the level at which old concepts of library instruction produce the greatest barriers. The idea that freshman-level instruction has provided or should provide all needed library "competency"; apparent unawareness of the fact that each subject area has unique

resource needs, resources and bibliographic access routes to them, with little or no carry-over from one subject area to another; and the Myth of the Card Catalog as an effective instrument for self-guidance.

2. Unless the bibliography instruction can find a strategic home in a subject's required courses, it will either miss a large portion of the majors in any given subject area, or it will reach them repetitively. And this latter situation constitutes a severe hazard.

3. A faculty member has the freedom to develop his course as he wishes. Even if a course is found for strategic placement of bibliography instruction, and even if the faculty chairman recommends this placement, there is no guarantee that the service will be used in each section of that course, or that it will be justified, motivated and utilized by library-resource assignment.

4. If confidence in this level of instruction is to be established, the librarian must take to classes a mastery of search techniques that exceeds that of the faculty who invited him. Yet it is an intellectual and physical impossibility for one instruction librarian to provide knowledgeable, upper-level bibliographic instruction in all subject areas.

As each problem became apparent, varied solutions were tried from quarter to quarter and year to year. From six years of such experiences several conclusions have been reached.

Selling an upper-level, undergraduate library instruction program requires caution, flexibility and patience. Although it is ethically and academically correct to open the campaign with visits to chairmen and explanations distributed to all faculty in a department, implementation occurs primarily on a person-to-person basis. Although I spoke in division or departmental faculty meetings, and distributed explanatory letters jointly signed by chairmen, very little happened until I began to approach faculty members individually. It was through these personal conversations that I soon and repeatedly learned that the conventional concept of library instruction had created an assumption that my service was for freshmen only, or that upper class students were already equipped to carry on resource searches since they were card-catalog-competent.

Although with some faculty members it was possible to orally describe the content of and need for subject bibliography instruction, with others, ghosts of library instruction inhibited communication. A more effective system, I found, was to prepare an annotated list of bibliographies and selected reference books relevant to the content of a course and send it to all faculty members teaching that course, accompanied by a note and followed by a personal telephone call. With bibliographies in hand the negative approach of "This will not be a

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'how to use the library' lecture" was unnecessary, and a positive discussion, free of mutual defensiveness, could proceed.

The bibliography lecture itself has gone through a long period of change and improvement. I have learned to always ask for the specifics of library resource assignments—a list of topics if possible. Then I put my bibliography to the test, evaluating each recommended bibliographic item against the realities of topics and levels of need. From the exploration, I select a search strategy, or alternative search strategies, that appear to be the most productive. Examples of useful bibliography entries are chosen to illustrate the range of citations and the differing values of available bibliographic access routes. The examples are typed on an electric bulletin type, proportional-spaced typewriter, xeroxed and made into color transparencies.

In the lecture at post-freshman levels, I have learned from repeated student feed-back that it is important to begin not with intellectual, but physical problems. A map of the particular library areas involved always appears on the screen first, and a copy is attached to each bibliography. The more mature and advanced the students, the more anxious they are about this problem. Time has become more precious, resource needs more urgent, and the idiosyncrasies of arrangement of each library department become mental blocks that must be removed before intellectual concerns can be heard.

The second step in each lecture is to demythologize the card catalog as an adequate search and selection technique. With this, the psychological barrier between the librarian and the library user seems to disappear, and we are ready to look at the bibliographic systems devised by their subject scholars, and to relate these to library organization patterns.

The arrangement of materials in a bibliography lecture was given a great deal of thought until it became evident that the search-sequence emphasis is most appreciated by students and faculty. Sometimes I begin with comprehensive, annual bibliographies and end with the selective and evaluative. Sometimes I reverse the procedure—depending upon factors that vary from subject to subject and assignment to assignment. Generalizations on this point are dangerous, since each subject area has unique information systems.

In most cases, at the end of the lecture I come back to the card catalog, to introduce the Library of Congress *Subject Heading* guide as an intelligent subject approach to the card catalog. This placement would seem to be an unlikely spot at which to present this problem, but surprisingly it has proven to be the best. Even though the hands of

the clock say *finis*, the attention of the class persists, indicating that the subject catalog has indeed been a severe problem.

The "guest lecture" spot contains hazards and limitations. The librarian comes into a learning situation that is not of his creation. It may vary from apathy or hostility to complete intellectual readiness. The guest must quickly evaluate the setting and proceed to either modify or take full advantage of it. The time allotted to the instruction may be quite incompatible with even the minimum ground that needs to be covered, and there is no next class period in which to pursue unfinished business. With experience, a person develops a sense of timing that enables him to cover the ground, but not necessarily to the satisfaction of the listeners. A library instruction lecture is concentrated nourishment, and what I called bibliographic beliyache can set in after a certain point. Written feed-back from the students, at either my request or the faculty's, provides insight and leverage for changes: a placement of the lecture that will better correlate with student readiness for the knowledge; a reduction of material covered; or an increase in the time allowed. As a guest lecturer, one is more subject to criticism. It is better, I believe, not to give a lecture at all than to give one which has not been carefully prepared.

A library instructor needs to keep in mind that this may be a new experience for the teacher, as it is for the librarian. An openly experimental approach, "Let's try this and then re-evaluate," puts neither one on the defensive and opens communication channels for a team-teaching situation.

The annotated bibliography is one of the most valued and used aspects of our library instruction program. In the beginning I prepared bibliographies only for courses in which I provided instruction, whether in personal or slide-tape form. Later I prepared bibliographies for courses in which instruction would have been partly repetitive of information provided earlier. For courses in the General Studies sequences, such as Introduction to Poetry, bibliographies were eventually developed into a suggested search-sequence format which included interpretations of citations in special bibliographies. Subject and reference librarians frequently provided guidance in bibliography preparation, helped to keep me informed about new bibliographies, and advised me of user problems.

At junior, senior and graduate levels, bibliographies are being prepared whenever time permits, and revised as often as necessary. At the beginning of each quarter memos are sent to all teachers of relevant courses, reminding them of the availability of bibliographies and lectures, with an invitation to phone in their requests. In the 1970 fall

quarter, over 1,800 bibliographies were given out to classes in which instruction was provided. A file was also kept behind the General Reference Desk where librarians gave them out to students whose questions indicated a need. But we were aware of the fact that, even by these methods, many who would value and use bibliographies would not be reached. In the last year we have experimented with keeping bibliographies in labelled trays at relevant locations. The pick-up response was much greater than we had expected, and trays had to be replenished almost daily. As the number of bibliographies increased, the display problem became greater until we found a wallmounted display rack with twenty-three letter-size pockets in a vertical unit. Two units were mounted by the Book Location Guide on the first floor, and all General Studies, Humanities and Fine Arts bibliographies are kept here. Other sections are mounted by the Book Location Guide at entrances to the Education and the Social Science-Business Library. Smaller, desk tray units are in the Science Library. In the 1970 fall quarter around 3,000 copies of bibliographies were picked up from these display racks and trays.

It is possible that this bibliography service, if expanded to provide assistance for each course that uses library resources, and kept current by continuous revisions, might be the single most *used* function of library instruction. The complete instruction program of MIT's Model Library Project, under Charles Stevens, consists of a combination of bibliographic "Pathfinders" and point-of-use-self-instruction lessons.[3] The subjects of the "Pathfinders" are very specific engineering topics, but they are in the process of involving other subject librarians and graduate library schools in the preparation of similar guides for other fields and these will be made available to any academic library. This plan, I believe, has great possibilities.

As indicated earlier, no one instruction librarian has either the subject and bibliography competence or the time to provide resource guidance in many subject areas. Because my subject specialities had been English and Speech and I had also been a teacher, it was natural that the first departments approached, in addition to freshman services, would be English and Education.

Repeatedly I have said that each subject area has its unique bibliographic systems, but English and American Literature have different bibliographic access routes available for almost every literary period. Already seventeen bibliographies have been created for courses in this department, and we have not yet covered its needs. Because of this diversity, we have not yet found a satisfactory system for assuring that the majority of English majors will know these bibliographic systems

before they reach the masters level. Some faculty members consistently ask for a lecture in each course for which library search is required. Others distribute the bibliographies, with or without guidance, and some give out selected reading lists, or an assignment with no bibliographic guidance. The English Department Undergraduate Curriculum Chairman, the Graduate Curriculum Chairman, and I are still looking for surer solutions.

In Psychology, the bibliographic access routes offer a sharp contrast to those in the *belles lettres*. One major bibliographic system, the *Psychological Abstracts*, *Psychological Bulletin*, and the *Annual Review of Psychology*, serve basic needs in all fields of psychology. Therefore, one lecture, given to a gathering of all sections of the first required course for all psychology majors, provides the search knowledge that will be used, not only through all their psychology courses, but throughout their professional careers. Good attendance and careful listening is assured by the fact that the teacher has already made a relevant literature-search assignment, and has promised test questions on this bibliographic knowledge. Being an experiment-oriented department, the psychology faculty provided unusually effective assistance in getting student evaluation and re-evaluation of the bibliography lecture.

Our largest Division is Education, which also includes our largest masters-level program. The search for an effective and acceptable placement of education bibliography instruction has extended over a period of several years of changes in administration and faculty. Presently it has a relatively secure home in a junior-level required course, Educational Psychology, of which there are a growing number of sections. Unfortunately the bibliographic access routes for even the undergraduate education student have so proliferated in the last five years that an adequate lecture in less than two hours is very difficult. But our quarter system puts heavy pressures on the teaching faculty, which in turn increases the problem of scheduling effective library instruction.

The growing field of Special Education also has growing bibliographic systems. The faculty of this department, with annotated bibliography in hand, selected in 1967 a senior level course in which they wished to place the bibliography lecture, and it has been used in that course almost continuously since that time.

Twelve education and psychology bibliographies are kept current, revised, and improved quarterly, and made available through classes or from display racks. More are in preparation.

Scattered bibliography lectures have been provided spasmodically in other subject areas, but it was my decision, which I have not regretted,

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to try to provide more thorough coverage of Education and English, rather than to dissipate my energies ineffectively over a wider range.

Valuable bibliographies and a few lectures have also been provided by librarians in some Social Science, Business and Music areas where I have not been able to work. After the first years, the Alton Center Librarian willingly assumed the responsibility for their freshman orientation, where personal, in-the-library instruction was possible.

By the winter of 1970, all freshman instruction for Lovejoy Library users had been converted to slide-sound programs. As predicted, when my exposure to freshman classes decreased, so did the concept of library instruction as a one-inoculation ordeal for freshment only. Only occasionally do I now hear the old echo, "I heard the library lecture!" and it is usually from a student who has returned to continue his education after a necessary hiatus.

Faculty acceptance of the service has tremendously improved. An interesting correlation has been observed: faculty awareness of student need for instruction can almost consistently be equated with the amount of time they, personally, spend in the library. Those who are most often seen in the library are also those most eager for bibliography and library instruction for their students.

GRADUATE INSTRUCTION: TOO MUCH TOO LATE

Of all potential areas of library instruction, I have found the graduate level most eager for bibliography assistance. The major portion of enrollees in beginning graduate classes come from a wide variety of undergraduate colleges and represent a wide range of ages. In the courses requiring extensive literature searches, or a knowledge of sophisticated reference services, the teaching faculty are appalled to discover that the majority of their students are ignorant of anything except the most elementary approaches to library resources. Most of those who have a more extensive knowledge of subject bibliography and search techniques have done their undergraduate work here, and have been the beneficiaries of our instruction program.

In Education the first course that asked for help and consistently used it was the masters-level Research Methods and Materials. In my first lectures to these classes, I assumed that I was merely providing a bibliographic review, and unraveling the mysteries of the physical library. Instead, for 90 percent it was an introduction to any bibliographic access route less elementary than the *Education Index* and the card catalog. A one-hour lecture soon grew to a three-hour lecture at the desperate request of the amazed teachers. This state of

bibliographic ignorance was used, whenever necessary, as justification for junior or senior level instruction.

Two very specialized instruction lectures for Education graduate-level courses have been used each quarter since their creation: One on Buros' *Mental Measurement Yearbooks* and one on the *Dictionary of Occupational Titles*, and other descriptive sources on occupations. For Buros, a guide has been prepared which is distributed to other graduate classes and kept available in the bibliography display racks.

On this commuter campus the majority of Education graduates are full-time teachers taking evening courses. Their acquaintance with the physical library is limited, and their time precious. In response to continued feedback about their feelings of insecurity and frustration concerning physical locations, this last quarter we prepared a 15-minute color slide-sound program that gives an overview of physical problems. It is kept in the AV Self-Instruction Lab and lent out to classes at the request of the faculty of graduate classes. Later we hope to be able to keep it in the Education Library.

For the English Department Research Methods and Materials course, a four-hour review of the bibliography of English and American Literature is provided, as well as lectures in various separate graduate-level classes.

Two responses have consistently followed graduate bibliography lectures: (1) "This is too much! I'm overwhelmed," and (2) "We should have been told about these things when we were undergraduates."

SAMPLE STATISTICS

In the 1970 fall quarter, fifty-five class-hours of personal bibliography lectures were given: "Lovejoy Library: a First Look" was shown thirty-eight times for over 2,000 newcomers: about 1,600 "Basic Library Mechanics Problems" were evaluated: the productions on "Drama Sources and the Art of Retrieval" were shown for forty-eight class-hours of instruction (in the *winter* quarter it was used for 100 class-hours): the Oral Communication slide-tape on sources for current problems was shown to over 500 students; and approximately 6,000 copies of bibliographies were used.

UNFINISHED BUSINESS

The Library Instruction Office, in the last year, has included a full-time secretary, a part-time librarian who assists with bibliography

preparation and the grading of "Basic Library Mechanics Problems," and a student who works about twenty hours a week.

A second library instruction position was approved by the library and university administration, but before a qualified person could be found, state budgetary crises at least temporarily suspended plans.

Nevertheless, we hope to develop not only new bibliographies and lecture services, but also user assistance in other forms. Library instruction should, we believe, encompass any form and substance which helps the user identify useful resources with the greatest possible efficiency. Total achievement of these objectives in this generation is quite unlikely, unless the information scientists make miraculous strides.

However, granted time, personnel and funds, there are almost endless things that could be done to make the academic library user's efforts more productive.

"Information Network" is a term intended for resources that are dispersed geographically and institutionally. But a large academic library needs an *internal* information network that will get the user to the potentially relevant location with as few false starts and dead ends as possible. This might include such things as a professionally staffed information desk that channels users in the best directions, possibly equipped with throw-away information sheets, or relevant bibliographies.

Certainly a library instruction program needs to include provision for self-instruction at the point of need. Emphasis upon availability at point of need represents a realistic acceptance of user motivation. A faculty member who is able to employ grade-book weaponry can get a student to a self-instruction lab, wherever it is housed. Lacking such a pry, the library must either keep its self-instruction devices where they are needed, or continue to provide time-consuming, repetitive personal substitutes. We prepared a taped lesson on the *Readers' Guide*, which is kept, with a *Readers' Guide* volume and practice slips, in the Self-Instruction Lab which is in the basement of the library. Freshmen working on their *Basic Library Mechanics Problems* were urged to use this lesson, if they had not received high school instruction. Very few did, until after they had failed the paper and were required to do it over again.

The place of self-instruction devices in the total library instruction program has never been realistically explored, but Shaw concisely defines their role: "By the very nature of machines, they are useful when there is a relatively high frequency of repetitive operations, and they are not useful when there is not a high frequency of repetitive operations.[4]

The card catalog as a subject for machine teaching immediately comes to mind. Considerable scientific work has already been done in this area, but results have often been misinterpreted. In most cases the experiment was directed, not toward finding an economical method of user assistance, but toward finding out more about teaching machines, their user acceptability and machine capability.[5] The Wendt study was conducted at Southern Illinois University, Carbondale Campus.[6] The experiment, which took place in the early sixties, was conducted by faculty of the Instructional Materials Department. Its primary intent was to learn more about machine teaching, e.g., pictorial and branching methods, and some basic library skills were selected for the content. The experiment served its primary function well, and at the same time proved that machine teaching was an acceptable method for the learner. The cost factor of the equipment made it functionally unfeasible for large enrollments, but the *programs* that were developed may later be made accessible by computerization. Unfortunately, readers and writers of library literature have frequently misinterpreted both the intent and the results.

Card catalog user-problems are so diverse and often unpredictable, that really effective self-instruction will be very difficult. But self-instruction would be feasible and effective for assisting the library user in many ways: interpreting the unique arrangements of each major area of the library; explaining indexes, abstracts and reference services that are basic search systems for a quantity of students; and possibly providing reviews of search-strategy recommendations in specific subjects. In our Education Library alone we *need* self-instruction for such bibliographic items as *Psychological Abstracts*, ERIC's *Research in Education*, Buros' *Mental Measurements Yearbooks*, as well as brief interpretations of such problems as periodical holdings, and the organization of curriculum materials.

Ever since the inception of our library instruction program we have been searching for acceptable point-of-use instruction equipment, but found none. MIT's Model Library Project recently made the same assessment, but they are adapting existing units to fit library requirements, creating instruction programs and experimenting with results. From their findings we hope to avoid costly mistakes on hardware as we work gradually into this undeveloped area. Whether or not the lessons themselves (software) prepared by one library may be usable in another will depend in part upon the need for adaptions to individual library situations.

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But there are reasons why self-instruction lessons cannot be expected to eliminate the need for other forms, such as the library-prepared bibliography and the classroom lecture: (1) the student must be told of the existence and importance of the item for which the instruction is intended; (2) instruction on an individual index, bibliography, etc., isolates it from the total related bibliographic system of a subject; (3) even if a search strategy lecture is available in a self-instruction format, someone must motivate the student to use it; and (4) individual self-instruction would be physically incapable of providing for the needs of quantities of students.

The classroom lecture, coordinated with the curriculum and motivated by faculty assignments, still remains, it seems to me, the *surest* way of providing the resource search competency that is *needed* for the largest number of students. And all other instruction methods are needed to reinforce, supplement, or if necessary, provide a substitute.

But a combination of all these instruction techniques will not replace, nor even limit, the services of the reference librarian who performs one of the most needed functions of instruction, *personalization*. Our reference librarians have found that the instruction program has stimulated *more* questions that indicate, not only a new awareness of need, but also at least a basic knowledge of what to ask.

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1. Patricia B. Knapp, *The Monteith College Experiment* (New York, Scarecrow Press, 1966) pp. 80-113.

2. Barbara H. Phipps, "Library Instruction for the Undergraduate," *College & Research Libraries* 29 (September 1968): 411-23; R. J. P. Carey, "Library Instruction in Colleges and Universities of Britain," *Library Association Record* 70 (March 1968): 66-70; Thelma Larson, "The Public Onslaught: A Survey of User Orientation Methods," *RQ (American Library Association, Reference Services Division)* 8 (Spring 1969): 182-87.

3. Charles Stevens, "Model-Library Project," *Massachusetts Institute of Technology Project Intrex, Semiannual Activity Report, 15 March 1970 to 15 September 1970*, pp. 76-92.

4. Ralph R. Shaw, "Using Advances in Technology to Make Library Resources More Available," in *Student Use of Libraries* (American Library Association, Chicago, 1964) pp. 72-82.

5. Mariana E. Axeen, *Teaching Library Use to Undergraduates: Comparison of Computer Based Instruction and the Conventional, Final Report* (Report No. BR-7-E-050, U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Research, 1967, ERIC ED 014 316); Paul R. Wendt, *et al. Study to Determine the Extent to Which Instruction to University Freshmen in the Use of the University Library Can be Turned Over to Teaching Machines* (U.S.O.E. Grant No. 7-11-076.00, Carbondale, Southern Illinois University, July 1, 1963).

6. The motivational film, "But I Saw the Movie," was created at the SIU Carbondale Campus. The new undergraduate library plans to initiate a library instruction program.

Course-related Library Instruction: A Case Study of the English and History Departments at Earlham College

by James R. Kennedy, Jr.,
Thomas G. Kirk, and Gwendolyn A. Weaver

THE LIBRARY INSTRUCTION BANDWAGON

Library instruction has recently become an exceedingly popular subject among academic librarians. Within less than a year, June 1970 to May 1971, there have been no fewer than three nationally advertised conferences on the topic.[1] In the senior author's sixteen years of reading the library journals, he can recall no other such meeting.

Another sign of today's intense concern with library instruction is the surprising response to his article: "Integrated Library Instruction," *Library Journal* 95 (April 15, 1970): 1450–53. So far more than 200 librarians have written for the course-related bibliographies mentioned in the article. We charged five cents a page and have sold over $1,000 worth of these annotated guides to reference sources for courses. Many librarians, from relatively little known junior colleges as well as from the major universities, wrote that they were hoping or planning to start programs of library instruction.

Of course, library instruction is an old, old topic. George Bonn's bibliographic essay cites about 400 items, beginning with 1876.[2] *Library Literature* cites quantities of articles under the subject heading, "Instruction in library use." Although the topic is far from new, what does appear to be new is the intense preoccupation with the topic.

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EDUCATIONAL REFORMS IMPLY THE NEED FOR LIBRARY INSTRUCTION

Ever since the Berkeley crisis in 1964, leaders in higher education have stressed the need for reforms. They have sided with students who wanted to break the lockstep features of mass education, characterized by lecture-centered, textbook-centered courses. They have recommended a more personal form of education, in which the student takes increasing responsibility for his own education, in which learning-how-to-learn becomes a primary goal.[3] For librarians, it is obvious that these two recommendations point to the need for library instruction. However, to the best of my knowledge, the reformers have not made this connection. In fact, they scarcely mention libraries. When they discuss ways of implementing their recommendations, their main thrust is toward smaller classes working closely with professors on interdisciplinary topics of current concern. Harvard's freshman seminars, which deal with various topics on the frontiers of knowledge, may be taken as a model of the reformers' recommendations. But again, for librarians, the need to incorporate library instruction into freshman seminars is obvious. What better way for a freshman to scan the frontiers of knowledge than to search current periodical indexes, abstracts and annual reviews!

LIBRARY INSTRUCTION CEASES TO BE AN INSOLUBLE PROBLEM

Hundreds of college and university librarians must have tried and failed to create an effective program of library instruction. As detailed in the article, the obstacles are many and troublesome.[4] There are so many ways to miss the bull's-eye.

The good news is that a few librarians, using various strategies, have reported achieving the impossible dream, at least to some extent. In 1964 Daniel Gore reported success at teaching a course in the basic essentials of bibliography to all 300 freshmen at little Ashville-Biltmore [Junior] College, and it only took one-fourth of his time.[5] Can such a course be successful at a really big institution? Mary Jo Peterschmidt at San Jose State College and Charles Shain at the University of California, Berkeley, have shown that it can. Both reported in 1970 that several of their librarians have successfully taught a similar course elected by all levels of undergraduates, from freshmen to seniors.[6] Taking a quite different approach, Patricia Knapp reported working with faculty at Monteith College to incorporate meaningful components

library experience into the assignments of courses in a new curriculum.[7]

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WHY EARLHAM BEGAN COURSE-RELATED INSTRUCTION

It would be soul-satisfying to report that the Earlham librarians began giving library instruction because of prayer and meditation on the above realities. Actually, we began in self-defense! In the beginning, 1965, for two or three days running, the reference librarians were running all over the Reference and Bibliography Areas trying to cope with hard questions from about fifteen beginning English majors. These students had been asked by their professor to answer twenty reference questions from the back of their textbooks.[8] The trouble was that several of these questions were hard enough to stump the reference librarians, and these students were juniors who had never heard of the Library of Congress' *National Union Catalog*, *PMLA*, *Cambridge Bibliography of English Literature* or the other sources they needed. By the time we had led the tenth student through the whole search process we were weary in feet and brain, but especially in the former. Granted that reference librarians need good feet, but they should not have to train like marathon runners, should they? It is splendid for English majors to learn the bibliography of their discipline, but surely there must be a better way to teach it! So, out of the trauma of these birth pains, Earlham College's program of library instruction was brought into the world. We phoned the English professor and arranged to meet his class to hand out a list of reference sources and to talk about them.

EARLHAM COLLEGE'S LIBRARY INSTRUCTION PROGRAM BRIEFLY DESCRIBED

Six years later the program has had enough of its weaknesses corrected so that it appears to us to function systematically and effectively. The program's guiding principles are that it is *course-related*, *demonstrated* and *graduated*. By *course-related*, we mean that we try to meet only those classes with term paper or other assignments that should motivate students to use reference sources. Many worthy courses have no such assignment, so we try *not* to meet those courses and avoid teaching students about reference sources they will not use immediately. Such a practice only serves to build up students' resistance against *any* library instruction, even for courses where the need is real. By *demonstrated*, we mean that the librarian works through a literature search similar to the one assigned to the students. He makes his

presentation as concrete and relevant as possible by using an overhead projector with transparencies of sample pages from five or ten of the most useful and difficult sources. He talks about search strategy and shows on the screen how all the reference sources can be brought to bear on a single term paper topic or other assignment. He hands out an annotated bibliography of specific reference sources, including call numbers, so that students need not take many notes. By *gradated*, we mean that instruction is in four levels, with each level building on and not repeating the information conveyed in the previous levels. These levels are: pre-freshman (which is not, of course, course-related), freshman, beginning major, and senior seminar. In addition, there is instruction for one-shot courses, such as Contemporary World Problems, an interdisciplinary course which does not fit into the four levels. The one-shot courses often include all levels of students, freshmen through seniors, and do not build on previous instruction, unless almost all students in the course have taken Humanities II.

For the last three or four years, the four librarians who give library instruction have been meeting with about seventy courses per year. This extensive library instruction is welcomed largely because of a curriculum that offers wide opportunities for students to explore topics of their interest. Besides courses with the traditional term paper requirement, there are freshman and senior seminars, tutorials, and opportunities for independent study. All these teaching modes lean heavily on library resources, but without library instruction, students would fail to find the appropriate library materials. As Patricia Knapp discovered at Monteith College, "motivation of independent inquiry through course assignments which called upon students to formulate their own questions and seek their own answers in the library, with minimal guidance, often produced *not* learning but confusion, frustration, and hostility."[9]

A fourth problem, the problem of overconfidence, is presented by those students who have had satisfactory experiences with their high school libraries and have no trouble passing the Library Knowledge Test. These students are disabused of their illusions of competence during a twenty minute talk to the whole freshman class by Evan Farber, the Librarian, during freshmen orientation week. He points out that even if a student has been able to use his high school library without difficulty, he should *not* assume that he is therefore able to find what he needs in a college library. This is because the college's library, in the depth and complexity of its resources, is more like a large research library such as the Library of Congress or Harvard University Library, than it is like their high school libraries. As an

example, he mentions that the college's library is a partial government depository and gets thousands of useful federal documents which do not appear in the main card catalog or in the *Readers' Guide*, but have their own index and their own classification scheme, both of which can confuse students on first encounter. He also tells the freshmen that the college has a program of course-related library instruction, which will introduce them to reference sources they will need *when* they need them for their papers, but that they should feel free to ask questions at the Reference Desk at any time.

As a result of the first level of instruction described above, the librarians, when they give the second level of instruction, can assume that certain basic reference sources have at least been introduced to all entering freshmen. A few freshmen may have been so alienated from libraries that they laughed at or cursed the summer letter, failed the test, and refused to appear for additional help. The librarians do not pursue them as if they were overdue books. Rejecting the library is one of their rights as free human beings, just as it is their right to pursue their own education in their own way, even if it means academic failure. At all levels of library instruction the librarians console themselves with the thought that "you can lead a horse to water but you can't make him drink." What we *can* do, and the faculty can do better, is to feed the horse enough salt so that he builds up a monumental thirst. This thirst may be equated to motivation, which can be generated in students by anything from fear of academic failure to enthusiasm for a master teacher and his subject. Our experience has been that the prime motivators for students to use the library are the professors and their courses. Far weaker motivators are the library building and its treasures, no matter how attractive, and the librarians, no matter how personable. Campus life offers many attractions besides the library, but even the interior linemen on the football team and the blasé party girls may be aware that intelligent use of the library can help them pass their courses and continue to enjoy the extracurricular facilities. Because the first level of instruction does not directly and immediately affect students' grades, it is understandable for students not to give it top priority.

THE SECOND LEVEL, FRESHMAN ENGLISH

The second level of instruction is designed to help students with a long paper assigned in the second term of a required two-term freshman English course titled Humanities I and II. During the first term, the small sections of about twenty students read a book a week and write

weekly short, personal reaction types of papers about these books. For these papers the professors discourage students from using *Book Review Digest* or other library resources, because the professors want only the students' first hand response to the book, not his response to the critics' judgments. Occasionally students in Humanities I will ask the Reference Librarian for a review of one of their books, but this seldom happens unless the book leaves the student totally baffled.

The second term, Humanities II, continues with the assignment of a biweekly four or five-page paper of personal response to a book. Half way through Humanities II students stop working on short papers and start on their long papers. For the long paper students are allowed to choose their own topics, just as long as they relate to some aspect of the books read in the term. In a recent version of the course, readings dealt with ideal communities, ranging in time from Thomas More's *Utopia* (1516) to Theodore Roszak's *The Making of a Counter Culture* (1969). Students often choose to deal in depth with one required book or part of it, but sometimes they choose to deal with a topic that is only tangentially related to the required reading. For instance, one student was allowed to write on Mohandas Gandhi's philosophy of community, even though none of the required readings had been concerned with Gandhi.

TWO VIABLE MODELS: COURSE-RELATED LIBRARY INSTRUCTION FOR THE ENGLISH AND BIOLOGY DEPARTMENTS

The ideal at which Earlham's librarians are aiming is most nearly realized in two departments, English and Biology. In these two departments, more than in any others, the library instruction is most fully integrated with course assignments, and the faculty are most enthusiastic about the librarians meeting their classes. The librarians' teaching method with the English Department is similar to their method with other departments, but the instruction is more thorough and systematic than with other departments. The work with the Biology Department is different in that it begins with a library exercise devised by the Science Librarian in cooperation with the biology professors. The rest of the paper will describe in some detail the librarians' work with these two departments. This description will lead naturally to mention of a number of general conclusions we have reached about how to give library instruction that is effective.

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THE FIRST LEVEL OF INSTRUCTION: THE LIBRARY KNOWLEDGE TEST

When we began giving instruction to freshman English classes, we found we were meeting a very diverse group of students in terms of their present knowledge of libraries. The majority were old friends of the *Readers' Guide*, and some needed only to have their acquaintance with it renewed, but a significant minority were innocent of any first-hand knowledge of this treasure. Students displayed a comparable variety of knowledge about the card catalog, the *Encyclopaedia Britannica*, and other sources we had presumed to be well known to Earlham College's freshman class, because of the College's "highly selective"[10] admissions policy. In planning a teaching strategy for freshmen, we decided it did not make sense to bore perhaps ninety percent of the students with thorough instruction in the *Readers' Guide*, just because ten percent greatly needed it. Neither did there seem to be any way to corral the unenlightened ten percent who were scattered among some fifteen sections of freshman English, even if we knew *which* students needed the extra help.

The solution we hit upon and have found exceedingly satisfactory is our Library Knowledge Test, which is now given to entering freshmen during freshman orientation week. Its primary purpose is to screen out those students needing additional, i.e., remedial, library instruction. Two further purposes are served by a letter that goes out to entering freshmen in July to notify them about the coming test. It includes an annotated list of the sources covered in the test as well as a few sample questions. This mailing serves both to remind certain students of what they might otherwise forget and to motivate certain students to visit their public libraries or to buy Kate L. Turabian's *Student's Guide for Writing College Papers* (1963) in order to study sources they never encountered in high school. Turabian's book is also used in the required freshman English course. The test draws on students' knowledge of the card catalog, the *Readers' Guide*, and several other sources which most high school graduates have used.[11] Almost no such knowledge exists for the 10 percent who score eighteen or less out of a possible thirty, and they are invited by personal notes and through their advisors to make appointments for additional instruction. The librarians meet these students in groups of four to six in order to go over their tests, question by question, and to try to compensate for three years of neglect by one good hour. Surprisingly, we find that the students include not just foreign and so-called disadvantaged students, but also students from small private schools with weak libraries and students

from first quality high schools who managed to avoid the library and still get good grades.

We have observed four problems associated with the test. First, students with skill at taking tests can get a passing mark without having a working knowledge of the sources tested. These students need the remedial help, but do not get it. Second, a few students are never corralled to take the test or to receive the additional instruction. After two attempts to catch these students, we give up, rather than to build up their resistance to the library by pursuing them further. Third, an hour of remedial instruction is hardly enough to compensate for years of neglect, and these students generally do not take time in these busy early days of college to try using the card catalog and the other sources. The most permanent and meaningful learning comes from actually using a source, not just from passing a test on it or from hearing about it in a small group.

The second level of instruction has been tailored to fit the widely scattered topics of Humanities II students' papers. At the same time the instruction covers seven basic reference sources which students will find useful not only for their immediate needs but also for their long term needs throughout four years of college. These sources are: *Subject Headings Used in the Dictionary Catalogs of the Library of Congress, Book Review Digest, Social Sciences & Humanities Index, Public Affairs Information Service Bulletin, Essay and General Literature Index, Biography Index,* and the *New York Times Index.* The first three sources are stressed because of their relative importance. Since we do not put "see also" cards in the card catalog, the subject heading book has no adequate substitute as a guide to the library's most important single reference source. Freshman who still think the card catalog can tell you "everything you always wanted to know about" the library need to hear that the card catalog does *not* evaluate books, but the *Book Review Digest* does. The *Social Sciences & Humanities Index,* of course, is as important to college students as the *Readers' Guide* is to high school students.

Evan Farber, the Librarian, meets each section for an hour just at the time the students are beginning to use the library to find materials. Proper timing is one of the keys to motivating students. He tries *not* to meet them when they are only choosing topics, because most students do not use the library at this time. He passes out a mimeographed annotated list of the seven sources mentioned above. The annotations are similar to those found in many printed guides to reference sources except that Library of Congress numbers or other locations are given

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Another difference is that under the annotation for the subject heading book is a sample term paper topic with a list of relevant subject headings, with the approximate number of books under each in the card catalog. For example, students read that for a paper titled "How Utopian Communities Have Dealt With the Aggressiveness of Their Members," the following subject headings are relevant: Utopias; Collective settlements; Anger; and Aggressiveness (Psychology). Because the subject heading book, *Essay and General Literature Index* and *New York Times Index* are all somewhat complicated, the handouts include multilithing of the same pages from these sources that are shown on the screen.

In his lecture-demonstration the Librarian shows sample pages from all seven sources, as he works through a literature search for a topic similar to what students will be working on. He demonstrates not only the usefulness of the sources to that assignment, but also the ways in which to make best use of the sources. For example, he points out the usefulness of "sa" and "xx" references under "Utopias" in the subject heading book, as well as the fact that the Library's holdings of periodicals indexed in the *Social Sciences & Humanities Index* are checked inside the front cover. He also discusses and demonstrates search strategy, with two emphases. First, students should begin a literature search on a topic by reading an authoritative summary with a selective bibliography. This can come from an encyclopedia, a textbook, or some other source. Second, students should generally narrow their topic as they first define it, because they will generally find that the library has too much material to cover in a long paper, and they do not have time to write a book. One Humanities II student, for example, planned at first to write his long paper on nineteenth century American utopian communities. How could he deal in depth with such a broad topic, one on which the Library has many books and articles? It would be much more feasible to deal with only one aspect of one utopia.

Besides teaching seven sources and search strategy, the Librarian also points out the usefulness of special bibliographies, which provide a thorough bibliography on a topic and can save students much time going through other sources. A good example is one on Aldous Huxley, which collects on two pages a 35-item list of criticism of *Brave New World*, which would only be partially found after an hour of poring through the seven sources.[12] He mentions that specialized bibliographies can be found through the card catalog by looking for the subject subdivision, "–Bibliography." He also recommends that students ask the

Reference Librarian if he knows specialized bibliographies or other sources that would help them. In conclusion, he demonstrates how to use the microfilm and microfiche readers.

At the beginning of the lecture-demonstration, the Librarian encourages students to ask questions if anything is not clear or if they have had problems using the library. However, students generally do not have questions, because they have scarcely begun to use the library. The questions come when a librarian meets about two weeks later with the same class broken down into tutorial groups of about five students.

To prepare for his meeting with the tutorial groups, the Librarian or Reference Librarian has a list with each student's topic and sometimes his outline and working bibliography. This meeting is timed to occur a week or two before the long paper is due, and it allows the librarian to deal directly with any difficulties students are having at finding materials. The librarian prepares and gives to each student a list of specialized reference sources and subject headings for his topic. For example, a student working on "The Effects of Celibacy on Some Nineteenth-Century Utopian Societies," receives a list with the *Harvard Guide to American History* and other reference sources in history. He also learns he can find materials through the card catalog and other sources under the names of specific communities, e.g., Ephrata, and under "celibacy" and "virginity." When the hour is over, students often go with the librarian to see where particular reference sources are located and how to use them. An important side benefit of the librarian's meeting with the tutorial groups is that it gives all freshmen a first hand demonstration of the valuable help that they can get any time at the Reference Desk. In the tutorial group, the librarian has shown that he is not a remote person, but is an enthusiastic human being who is eager to go more than half way to help students.

The hour with all the different tutorial groups is an educational experience for the librarian as well as for the students, because it is perhaps the librarian's one opportunity to see first hand the wide range of students' library use within a single class. A few students have obviously followed the procedures recommended in the lecture-demonstration and have narrowed their topics as they found more materials by searching the seven sources. A few might just as well not have attended the lecture-demonstration, and perhaps did not, in fact, because they are still trying to write a personal reaction paper without using the library. Perhaps the majority have ventured beyond the card catalog and *Readers' Guide*, but have failed to find much of the most useful materials on their topics. It is imperative for most students to go

beyond the card catalog, because it lists only about thirty books under "utopias," and there are some 300 freshmen. When all the students are writing on the Black experience or some other topic on which the card catalog offers a wealth of materials, it is much easier for students to avoid digging.

THE THIRD LEVEL, A COURSE IN LITERARY RESEARCH

English 60, Introduction to the Study of Literature, has two characteristics that make it ideal for course-related instruction. First, it is a course required of all beginning English majors, and, second, it includes the study of bibliography as a major component. It has become apparent to us that the beginning majors in any discipline are the students who are most ready to dig into the bibliography of their chosen field. However, if there is no course with a bibliographical emphasis required of beginning majors, then the librarians ought to relate their instruction to whatever advanced courses in a discipline are requiring students to use the library. In the latter case, it is impossible to avoid considerable repetition. For example, a number of advanced psychology courses need and receive library instruction, but the librarian has to cover *Psychological Abstracts* and *Annual Review of Psychology* in each course, even though it may mean repetition for a third or more of the students. Such a situation leads to absenteeism and low morale among students and librarians. If the librarians could plan curriculum, they would plan for all beginning majors in all disciplines to take a course that required students to know and use the bibliography of their discipline.

Besides other assignments, English 60 currently has two assignments that lead students to dig into reference sources in literature. The first is the same collection of hard questions, described earlier, which forced the librarians in self-defense to begin giving library instruction. However, currently a student tackles only one question, and he is prepared for the experience by having the library's own 36-page handbook of reference sources for English literature,[13] as well as a twenty minute talk by the Librarian. Evan Farber advises the students to analyze their assigned reference question according to time period, genre, and nationality, because reference works in the handbook are classified in these ways. He also suggests that they pay attention to whether their question concerns a fact, for which a handbook or history is needed, a question of bibliography, for which a bibliography is needed, or a question of critical interpretation, for which an index to criticism is

needed. Furthermore, he stresses that reference questions in literature are often interdisciplinary and call for the use of Constance Winchell's *Guide to Reference Books*, a useful means of discovering useful reference sources in history, religion and other disciplines.

The students were given a few days to answer their questions, without any further help from the Reference Librarian. A number of students diligently pursued their question for several hours and learned a good deal about reference sources in literature, even if they did not solve their problems. The manageable frustration of trying to answer one hard question turned out to provide good motivation.

Students listened with great attention when the Librarian met the class immediately after this assignment and worked through all the questions in about an hour. It was as if Houdini were sharing his secrets with a group of neophyte magicians.

One of the most instructive questions was to "give a complete bibliography of the writings of the contemporary American novelist Mark Harris." This illustrated the comprehensiveness of *The National Union Catalog*, so far as books are concerned. It also showed the importance of the various indexes to literary periodicals, short stories, essays, and plays. It even showed the unexpected usefulness of *Readers' Guide*, because Harris wrote for the *Nation* early in his career.

Perhaps the hardest question was one on the historical background of Virginia Woolf's *Orlando*, which led the student, by means of Winchell, into reference sources in history. The question read: "In Virginia Woolf's *Orlando* occurs a description of a fair held on the frozen Thames during a particularly cold winter. List five winters in the sixteenth and seventeenth centuries when such 'frost fairs' actually were held."[14] The answer turned out to be in Robert Chambers' *The Book of Days; A Miscellany of Popular Antiquities in Connection With the Calendar, Including Anecdote, Biography and History, Curiosities of Literature and Oddities of Human Life and Character* (1906). This question may have been especially time consuming and frustrating, but the student learned a considerable amount about the scope and arrangement of the many sources which did not give the answer. It was comparable to Edison discovering all the many materials which would not function as filament in his incandescent lamp.

The goal of this assignment was not, of course, to produce reference librarians. If this were the case, then many more questions would have been assigned. The assignment did succeed in stimulating students to discover something of the wealth and variety of reference sources in literature, and it prepared them for their major assignment in English 60.

This assignment was to choose a major literary work, either a novel, a poem, or a play, and in working out their own interpretations, to explore: (1) the critics' views; (2) its relation to the contemporary culture and events at the time of writing; and (3) its relation to the author's life. Students were asked to organize all this information into a scholarly paper, with appropriate bibliography and footnotes.

An early step in this assignment was to submit their choice of literary work and an annotated working bibliography. For several reasons, this is an invaluable teaching device. First, it motivates students to get involved with their papers long before the deadline. The road to academic failure is paved with term papers begun two days before their due date. A second benefit of the early working bibliography is that it gives the professor enough time to deal with difficulties before they become insurmountable. Perhaps the student is heading for bibliographical starvation, because he has decided to focus on a minor author. Such a decision can be changed much more easily in midterm than in the last week of the term. A third benefit of the early bibliography is that it gives the librarians a chance to point students to important sources they may have overlooked. The professor is less likely than the Reference Librarian to be aware of these sources, because, of course, he is not working with the sources full time.

This third benefit of the early bibliography points to the solution of the greatest problem of our instruction: nonuse of the sources taught. Students in many courses have found that they can get good grades without using the sources they heard about in the library instruction. Since professors, by and large, are also nonusers of these sources, they tend to be uncritical of a bibliography which has appropriate length. The professors' main concern is *not* whether students have found and used the best books and articles but whether the students have dealt adequately with such materials as they did find. No less a concern for professors is whether students are reading critically and not just patching together a mosaic of materials from the library. For all these reasons, students and faculty have benefited from having a librarian examine the preliminary working bibliographies. We seldom do this, except in science, but it is clearly the growing edge for our program of library instruction. By now our rapport with faculty is sufficiently good that we have not encountered much resistance when we have offered this service.

THE FOURTH LEVEL, THE SENIOR SEMINAR

The capstone in a department's course work and in the library instruction program is the senior seminar. These senior seminars serve to

integrate the previous course work in a department and to relate this work to at least one other discipline. Students in senior seminars generally work on a major paper on some interdisciplinary topic. The librarians who work with senior seminars do not give a lecture-demonstration of selected reference sources, because students are working on such a wide variety of topics. Instead, we prepare lists of specialized reference sources and specific subject headings, much as we do for Humanities II tutorial groups. For instance, a student working on the religion of beat (short for beatific) poet Allen Ginsberg would be apprised of the *Index to Religious Periodical Literature* and Norman Kiell's *Psychoanalysis, Psychology, and Literature: A Bibliography* (1963), as well as the subject headings "Religion and literature" and "Literature–Psychology." However, this description is theoretical, because currently the librarians are not meeting the senior seminar in English, as they do in the psychology and other departments.

THE ONE-SHOT COURSE, SHAKESPEARE

The Shakespeare course enrolls all levels of students, including non-English majors from freshmen to seniors, and the library instruction for it does not depend significantly on previous library instruction. Since it does not fit into the gradated levels of library instruction, we call it a one-shot course. The reason that Shakespeare bibliography does not depend on the general literary sources, such as the *Oxford Companion to English Literature* and *PMLA*, is that certain specialized Shakespeare handbooks and bibliographies are so much better suited to students' needs. Students can get an excellent bibliographical start just by using Oscar Campbell's *Reader's Encyclopedia of Shakespeare* (1966) and Ronald Berman's *A Reader's Guide to Shakespeare's Plays* (1965). If they need something more comprehensive, they can use Gordon Smith's *A Classified Shakespeare Bibliography, 1936-1958* (1963). The Librarian dwells on these in his lecture-demonstration to the Shakespeare class, but, of course, none of these would be useful to students in other English courses.

EVALUATION OF LIBRARY INSTRUCTION IN THE ENGLISH DEPARTMENT

Although the librarians' work with the English Department has never been formally evaluated, almost all the signs are favorable. All of the thirteen English faculty members, except one, continue to accept the librarians' offers to meet their courses when it is appropriate. The

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dents generally listen attentively and use the sources taught without ch further help at the Reference Desk. Such reference questions as y do ask are at a more advanced level than formerly. This is not to that the college's English majors have an adequate understanding of library, but they are notably more competent library users than y were when the program began seven years ago.

COURSE-RELATED LIBRARY INSTRUCTION IN THE BIOLOGY DEPARTMENT

This part of the case study will describe the program of library struction provided for biology students. A prime objective of the iology Department is for the student to develop the skills with which can educate himself. One of these skills is that of using the library. Now, five years after our program of library instruction in the Biology Department began, one of the science professors could say, "Our introductory science courses include a more thorough and successful training in information retrieval than we are aware of at any other stitution."

THE INTRODUCTORY COURSE IN BIOLOGY

Biology students, both majors and non-majors, begin by taking the wo-term General Biology course. A popular course, it is elected by bout one-half the freshman class, and taken ultimately by almost wo-thirds of the student body to fulfill their distribution requirement n science. In recent years, the course has focused on the study of such ues as ecology, evolution, genetics, and chemistry. Components of the ourse include lectures, laboratories, discussion groups, and library xaminations, each of which is designed to meet the following ducational objectives, defined in terms of abilities:

1. The ability to locate pertinent information, especially from the ibrary.
2. The ability to read scientific literature critically.
3. The ability to solve problems by using scientific literature.
4. The ability to communicate one's biological investigations.
5. The ability to organize one's academic work.

These objectives cannot be achieved by the librarians acting alone. Their efforts will succeed only if faculty members teaching the course re committed to the need for their students to develop the abilities isted above. With faculty support the librarian can integrate library nstruction into the course, which is far better than trying to teach

library skills as an adjunct to the course. Such integration is seen as the key to motivating students to learn to use the library. If a student can pass a course on the basis of material he can get from the textbook, lectures, and laboratories, he will hardly feel compelled to use the library. Therefore, if a student is to develop library skills, library work should be an integral and fundamental component of the course. As a matter of fact, the professor in General Biology tells students early in the course that they will need to develop their library skills in order to find information beyond the textbook and lectures, to prepare for laboratory experiments, and to pass examinations.

REFERENCE SOURCES AND LIBRARY SKILLS TAUGHT IN GENERAL BIOLOGY

From their understanding of the ways that undergraduates can most effectively use scientific literature, a faculty member and the Science Librarian developed the following list of reference sources and library skills to be taught:

I. General types of reference books and some specific examples.
   A. Encyclopedias: e.g., *McGraw-Hill Encyclopedia of Science and Technology*, third edition (1971).
   B. Dictionaries: e.g., King, *Dictionary of Genetics* (1968).
   C. Monographs.
   D. Serials.
      1. Periodicals.
      2. Annual reviews.
   E. Bibliographies.

II. Periodical indexes and scientific abstracting services.
   A. *Biological Abstracts*, its organization and how to use the author and key word indexes.
   B. *Science Citation Index*, its uniqueness and how to use it.

III. The Library Card Catalog. *Subject Headings Used in the Dictionary Catalogs of the Library of Congress*, 7th ed. (1966) is emphasized and explained, much as it was in the previously described Humanities II course. This repetition seems unavoidable.

IV. A general understanding of the relationships among the various types of scientific literature and the ways they are organized.
   A. Primary literature, which reports original research, appears in journals and report literature.
   B. Secondary literature, which synthesizes and surveys science, can be found in monographs, journals and annual reviews.

C. Tertiary literature either presents specific information or provides a broad survey of a field for the beginner. It is found in handbooks, dictionaries, encyclopedias, and textbooks.

V. Search strategy. Basic search strategy involves the initial use of encyclopedias and texts, followed by monographs and reviews, and finally a search of the periodical indexes. It also involves knowing where to start the process with a particular search. In addition, students should recognize when a search step is no longer useful, when to retrace a step, and when to skip a step. One of the most important but unmeasurable skills is one's personal method of search.

VI. The analysis of a subject so that the proper questions can be asked of the literature. This is perhaps the hardest skill to teach. This analysis includes answers to such questions as the following:

A. How is the subject defined? What fields are related to it?
B. Is the bulk of information in the field newly discovered?
C. What are the controversial aspects, if any?
D. Who are the important scientists in the field?
E. Do scientists use certain organisms to study the subject? (For example: *Drosophila* in genetics, *Planaria* in chemical learning)
F. How is the subject discussed by authorities in the field? Are there any confusing terms? What synonyms are used?

THE FOUR STAGES OF LIBRARY INSTRUCTION IN GENERAL BIOLOGY

Most of the library instruction in General Biology occurs at four stages: (1) in a regular laboratory period; (2) in the Guided Exercise; (3) through practice using the library in the library examinations; and (4) through the use of the library preliminary to designing an experiment. In the first stage, the regular laboratory period, a brief introduction is given to the role of the library in the course and why it is so heavily stressed in the course's objectives. Students also receive practical information, such as how to use microfilm readers.

THE GUIDED EXERCISE

The second stage, the Guided Exercise, was designed to lead the student through an actual library search on a particular problem. Although it is similar to programmed instruction, the Guided Exercise

cannot be completed at one's usual place of study. It requires going to the library and working through a series of steps which engage the student in the appropriate search strategy.

The Guided Exercise is divided into three sections. The first has students use their textbooks and an encyclopedia as starting places for library research. As students work along, they learn about and use the card catalog, the subject heading book, and an annual review. The second section is on the use of the *Science Citation Index* and the library's serials file. The final section concerns the effective use of *Biological Abstracts*, beginning with its key word index. Students follow an illustration of how a subject must be analyzed for key words in order to search *Biological Abstracts*.

The Guided Exercise is presented to students along with additional materials they will need. These include a mimeographed guide to the library's reference sources in biology, a list of periodicals received by the library which are of interest to biology students, and guides to *Science Citation Index*, *Biological Abstracts*, and *Bioresearch Index*, which are available from their respective publishers.[15]

The first library examination, which is the third stage of library instruction, consists of a single essay question on a specific subject related to the general subject being studied. Following are four sample examination questions:

1. Discuss the factors that control the distribution of barnacles. Select a single species. Support your discussion with evidence—*not your opinion*.

2. Downtown businessmen are continually concerned with the excrement covering the outside of their buildings. They, of course, have tried many things to remove the producer of the excrement—the starling from urban United States. Discuss the ecology of these increasing starling populations and the problems involved in controlling them.

3. Discuss five examples of possible exceptions to the rule that there is no such thing as sympatric speciation. Define your terms and take a position on whether or not you support the rule.

4. Document three examples of homology and three examples of anology in the evolution of plants or animals. Is phylogenic classification the best way to do it, or would a more ecologically oriented taxonomy be better? What are the advantages of each?

Students are asked to spend about five hours in the library researching the questions, and then, on the basis of their research, to write a paper of no more than 1250 words. This type of examination is given four times during the two terms.

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The fourth stage of library instruction in General Biology comes with the use of the library in experimental laboratory work. Students are asked to prepare for the lab problem by finding information beyond what is presented in the text or lecture. That is, they are asked to read primary literature in order to familiarize themselves with the background of the problem and any work already done toward its solution.[19]

BIOLOGY MAJORS IN CHEMISTRY COURSES

During their sophomore or junior year, biology majors are expected to take the three-term introductory chemistry sequence. In the first two terms there is some library use and a modest amount of library instruction. This instruction emphasizes the same search strategy previously described, but it focuses on different reference sources. Even though this teaching of search strategy is repetitious to the biology majors, it is nevertheless felt to be beneficial. But even if this were not the case, these courses are for chemistry students and cannot be tailored to suit biology majors. In the third term, organic chemistry, students have assignments requiring use of the organic-biological chemistry literature. Library instruction in this latter course partly consists of a series of problems involving the use of the Chemical Rubber Company's *Handbook of Chemistry and Physics*, Lange's *Handbook of Chemistry*, and the *Dictionary of Organic Compounds*. Because these three compendia are basic to any laboratory work in organic chemistry, we think that students should be thoroughly familiar with them. A second purpose of the problems is to teach the differences between the two handbooks, which represent the two most widely used methods of organizing entries for the names or chemical formulas of organic compounds.

Students in organic chemistry also receive a lecture-demonstration on *Chemical Abstracts*. This is the basic indexing source for the chemist, and it is an alternative to *Biological Abstracts* for the biology student who needs information for organic or biological chemistry.

UPPER LEVEL BIOLOGY COURSES

Additional information is provided in the following upper level biology courses.

1. Ecology. This course includes an assignment to evaluate the biological implications of a specific human activity, such as building a

particular dam. The library instruction for this assignment prepares students to use: (1) non-biological literature, such as newspapers and popular periodicals; (2) government documents; and (3) ephemeral material, such as statements issued by industrial management and conservation groups.

2. Plant Physiology; Cell Physiology. Since both courses involve advanced experimental work, students are introduced to handbooks and compendia of laboratory techniques, such as the American Federation of Societies for Experimental Biology's handbooks, *Methods of Enzymology* and *Methods in Biochemical Analysis*. Also, since both courses deal with chemicals, *Chemical Abstracts* is reemphasized, and students are shown how to use it for information about a particular organism.

3. Various courses. Students receive short lecture-demonstrations on how to use *Bioresearch Index* and the CROSS Index and Systematic Index of *Biological Abstracts*.

EVALUATION OF LIBRARY INSTRUCTION IN BIOLOGY

This program of library instruction appears to be effective in teaching biology students the library skills they need to continue their self-education. Much of the credit must be given to the faculty members, who have shown students the importance of the library by providing class time for library instruction and by making library-related assignments. Students tend to develop a favorable attitude toward the library, because, when the Science Librarian meets the class, he shows them how to carry out their course assignments. Someone has said that the three best ways to teach are "by example, by example, and by example." This teaching method is at the heart of our program and another reason for its success. One of the reasons that the authors have taken time to write this case study is that we believe others can learn from our example and can adapt parts of our program to their own situations.

1. A closed meeting convened by the Instruction and Use Committee of the Association of College and Research Libraries and the Junior College Library Section of the American Library Association at the American Library Association

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annual meeting, June 1970. Conference/Workshop on "Instruction in the Use of the College and University Library" at the University of California, Berkeley, July 13-14, 1970. First Annual Conference on Library Orientation for Academic Libraries, at Eastern Michigan University, May 7, 1971.

2. George S. Bonn, *Training Laymen in the Use of the Library* (New Brunswick, N.J., Graduate School of Library Service, Rutgers, the State University, 1960). (The State of the Library Art, v. 2, part 1)

3. University of California Academic Senate, Select Committee on Education, *Education at Berkeley: Reports* (Berkeley, 1966), pp. 44-48.

4. *op. cit.*, pp. 1452-3.

5. Daniel Gore, "Anacronistic Wizard: the College Reference Librarian," *Library Journal* 89 (April 15, 1964): 1688-92. Gore found the available textbooks so unsatisfactory that he wrote his own, which also has been used at Berkeley: Daniel Gore, *Bibliography for Beginners: Form A.*, (N.Y., Appleton-Century-Crofts, 1968), 192 pp.

6. "Selected Conference Papers: July 13-14, 1970 Conference/Workshop on Instruction in the Use of the College and University Library'." 31 p. Available from ERIC, No. ED 045 103.

7. Patricia B. Knapp, *The Monteith College Library Experiment* (N.Y., Scarecrow Press, 1966), 293 pp.

8. Richard Daniel Altick, *The Art of Literary Research* (N.Y., Norton, 1963), 276 pp.

9. Patricia B. Knapp, "The Library's Response to Innovation in Higher Education," *California Librarian*, 29 (1968): 146.

10. James Cass and Max Birnbaum, *Comparative Guide to American Colleges for Students, Parents, and Counselors, 1970-1971* (N.Y., Harper & Row, 1969), p. 828. Cass and Birnbaum rate only 36 institutions higher than Earlham College.

11. The first version of the test simulated a paper on the Vietnam war, which a number of freshmen criticized for being too much like high school.

12. Claire John Eschelbach and Joyce Lee Shober, *Aldous Huxley: a Bibliography, 1916-1959* (Berkeley, University of California Press, 1961), pp. 107-8.

13. Until Spring 1971 students used as a textbook: Vitale, Philip H., *Basic Tools of Research: An annotated Guide for Students of English*. 2d ed. (Woodbury, Barron, 1968). Since this source was at least five years out of date, the librarians were moved to compile their own guide, *Introduction to the Study of Literature: Basic Reference Sources in Lilly Library*. About one-third of its 206 titles were published in the last five years. It sells for $1 prepaid by cash or check made out to Earlham College.

14. Altick, *op. cit.*, p. 224.

15. For a full explanation of the details of the Guided Exercise and its usefulness, see Thomas G. Kirk, "A Comparison of Two Methods of Library Instruction for Introductory Biology Students," *College & Research Libraries*. In press.

16. For full details on the experimental laboratory and the library's role, see, Thomas G. Kirk, "The Role of the Library in the Investigative Laboratory," in *The Investigative Laboratory*, prepared by the Commission on Undergraduate Education in the Biological Sciences' Panel on the Investigative Laboratory. In preparation. The same article is scheduled to be published in *CUEBS News*, June 1971.

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proposal for a program of library instruction

by Martha Hackman

A major shortcoming of American librarianship and library literature is the failure to provide critical, retrospective evaluation. A nationally-publicized program is often deemed, ipso facto, *a "success." Having achieved national recognition for a "successful" program, few, indeed, are the institutions that would forthwith consider abandoning or drastically revising a "successful" program; even rarer are those who would actually do so.*

California State College, Los Angeles, was among the first institutions to provide library orientation and instruction by telecourse. They have, for the reasons explained herein, decided to replace it with a different program of instruction. The article which follows is the actual proposal for change submitted to the administration; it was not prepared for external use or for publicity. It is essentially a request to replace a past "success" with a far more difficult, less "in," less spectacular, but more relevant program.–Ed.

It would be presumptuous to expect to find the solution to a problem which has plagued librarians for over sixty years. Since John Cotton Dana, in the *ALA Bulletin* for 1909, wrote about "Book Using Skills in Higher Education," the problem of what has come to be called instruction in the use of the library has continued its grim course through the literature down to the present day. Now, however, when basic assumptions are being questioned, when traditional practices are being re-examined, hope rises once again that a way may yet be found. My purpose is less ambitious than the solution of the whole problem;

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but before attempting to make some modest proposals for revision of the program of library instruction at California State College, Los Angeles, I would like to look at traditional library instruction with, if possible, a fresh eye.

At one point in the play *Marat/Sade*, Jean-Paul Marat, the political extremist, says to the Marquis de Sade, the extreme individualist, "The important thing is to pull yourself up by your own hair, to turn yourself inside-out and to see the whole world with fresh eyes." It is from this radical and uncomfortable position that I have tried to look at library instruction and at the assumptions on which it has uneasily rested for so many years. I confess that I have avoided examining the assumption that use of the library should be taught at all—an issue on which I must plead a conflict of interest. I note, however, that there are dissenting voices, and that the attempt to teach library use has been called a collision course with futility. I have accepted, tentatively, the assumption that use of the library *can* be taught, since the few studies available are so inconclusive as to leave the door open for hope. I have tried to come to grips, principally, with the issue of what should be taught, hoping that when this basic problem is solved questions of ways and means will fall into place.

My method has been an unscientific mix of reading, talking, and thinking. I have drawn upon the writings of Daniel Bell and Jerome Bruner in education and on the pioneer work of Patricia Knapp in relating library instruction to the curriculum; I have talked informally with librarians, students, and faculty; and I have tried to sift and digest my impressions and to re-examine my own experience and thinking.

TRADITIONAL LIBRARY INSTRUCTION

Traditional library instruction centers around the card catalog, the periodical indexes, classification, and reference books. Sometimes it includes the history of books and libraries or practical hints on searching for information. The usual method, whether it involves a tour or lecture, on film or television, consists in telling the student what he is expected to know and then requiring proof that he has learned it. Sometimes he is required to complete exercises or other assignments often of no practical value to him and unrelated to his course work. (A notable exception is the Monteith College experiment under Patricia Knapp.)

This arrangement seems to give some students a sense of security. Having learned certain filing rules, class numbers, and reference tricks, they feel more confident in their approach to the library. It is possibly

however, that their feeling of security is a false one, and that because of it they are actually inhibited from attempting explorations and making discoveries as they might otherwise have done. We do not, of course, know.

Other students, more active and rebellious, tend to resist this kind of instruction. Whatever one may think of the student rebels, it is hard to deny that they have pointed up some real defects in higher education: the large, impersonal class, the dull lecture, the lack of concern for the individual, etc. If librarians have not been included in these accusations, it is not because they have been blameless. Too often library instruction has served as a sort of Procrustean device for fitting students into a rigid system designed without consideration for their needs. The motives behind many such programs have had more to do with publicity, economy, or enhancing the librarian's image as a member of the teaching faculty than with the education of students. By and large, library instruction has been impersonal, mechanical, and above all, dull. The sense of wonder with which even the most blasé freshman approaches his first large library suffers an early death at the hands of the librarian who insists that he remember that abbreviations are filed as if spelled out. Ready to explore and to learn, he is cheated out of the joys of discovery by being told more than he wants or needs to know about library mechanics. No wonder the more rebellious students dismiss library instruction as irrelevant.

The common student plea for "relevance" in education is sometimes mistakenly assumed to mean a demand for that which is immediate and practical. Zen, however, may be as relevant as driver education, or perhaps more so. The word *relevant* derives from the same root as *relieve*, so that what is relevant must be in some sense relieving. Some definitions of *relieve*, culled from the OED, will clarify the relationship:

to rescue, succor, aid
to make less tiring, tedious, monotonous, disagreeable
to make clear or evident
to set free, release

Relevance, then, may be relief from the boring, the inconsequential, the meaningless. What is meaningful is perceived as being immediately useful, or is felt as the fulfillment of a real need. In terms of library instruction this might mean a book, a fact, a search strategy which is applicable to the task at hand. It might also mean a concept which organizes the student's scattered bibliographic knowledge into a meaningful pattern. Almost certainly it does not mean a collection of unrelated facts and titles which he is forced or cajoled into learning

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because someday, possibly, they may prove useful. This is what traditionally, he has been offered.

I would be one of the last to urge that students be allowed to determine their own curriculum; but in this instance, I feel, we may learn a lesson from their plea for "relevance." This is that meaningful instruction is practical, specific, and geared to the needs of real students who must wrestle with real and often refractory subjects of library research. We must stop teaching to an abstraction called "the student" and offering him simplistic formulas which do not fit real problems. We may even have to modify our librarianly virtues of thoroughness and efficiency and make room in our curriculum for trial and error, serendipity, and other unorthodox methods of research.

A student once said to me, "I've written a lot of papers. I get books, take notes on a lot of garbage, write it up pretty with footnotes, and get a grade on it. It's boring. But *this* is really relevant!" What was different about his present project was that he was for the first time dealing with primary sources, grappling with problems of collecting first-hand information, sifting and evaluating and making it either prove or disprove an idea of his own. He was no longer passively acquiring and transmitting other people's ideas. It seems to me that we have missed many opportunities to challenge and engage students while we continue to tell them how to use the library. The library offers countless possibilities for varying the lecture method of library instruction and encouraging student participation in learning. The lecture itself, given the necessary space and equipment, might be greatly improved by the judicious use of audiovisual aids. Motivation, however, should not be confused with gimmickry. The best motivation is still an interest in the material itself and a growing sense of mastery over it.

It is possible that library instruction may fill a need which many students dimly sense but of which they are not consciously aware. This is the need to bring order out of the mass of bibliographic publications with which they are confronted. To discover that bibliography has a function, a history, and a structure, and that it has recognizable, recurring forms, makes it easier to deal with an array of items which, taken individually, would seem overwhelming. Increasingly the students who come to us are products of the new elementary and secondary curriculums. They have dealt from an early age with mathematical concepts and have encountered at ascending levels in the spiral curriculum the key concepts of the social sciences. I do not think we need to fear offering them bibliographic concepts in place of lists of titles.

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If we can succeed in making library instruction a "relevant" experience I think we shall have largely solved our problem. What is meaningful is gladly and easily learned. Although we know far too little about what skills we are trying to teach, we may take heart from the example of a rural New Zealand teacher who, with a little common sense and a great deal of empathy, started a revolution in the teaching of reading. Disregarding orthodox textbooks, defying the educational establishment, she offered her Maori children the words which, for reasons of their own, were meaningful to them, and they learned.[1]

All that a teacher can do, in fact, is to find what will stimulate and engage the student and then step aside while he pursues his own education. I believe, then, that we need to shift the emphasis from teaching students how to use the library to challenging and helping them to learn on their own; from general library instruction for everyone to individual learning which is related to real and specific library situations. It may be that the term *library instruction* will have to be replaced by one which better describes the new emphasis. We will also, certainly, need to re-examine our current program.

THE LIBRARY TELECOURSE

The background of the library instruction program at California State College, Los Angeles, has been too well documented to require repetition here. See Clayton Brown's article, "TV or the Herded Tour" in the *Library Journal* for May 15, 1965, and also "A Possible Solution to Library Orientation: Background and Development of the Library Telecourse at the John F. Kennedy Memorial Library, California State College, Los Angeles" (mimeographed). It should be noted, however, that the dedication of many members of the library staff over the years, particularly that of the hard-working Library Orientation Committee, has made the library a nationally recognized leader in this field. To maintain this leadership and fulfill the expectations aroused by the current program requires a continuing re-evaluation, especially in this time of rapid change.

It is hard to realize that the Telecourse was conceived in the days before Berkeley erupted and began what was to become a revolution in higher education. Since 1963 it has reached over 7,000 students. In doing so, however, it has offered the same fare to all, regardless of their level of library competence or their specialized subject needs. Its methods has been that of telling and testing, necessarily so since the medium allowed no means for student participation. It has been offered at times convenient for scheduling the facilities, not always at times

when the student could most profitably use such instruction. In short it has been geared to the mass approach and emphasizes teaching in the sense of telling rather than the process of learning.

If, however, our aim is to stimulate the student to take responsibility for his own learning we must first see him as an individual. This means allowing for differences in library experience and competence and focussing on his real and specific needs. Second, we must allow him to make his own discoveries, with help when it is needed. Finally, we must try to encourage, not to stifle, the interest and excitement which could be part of library research. Ideally, of course, such a program would mean individual guidance for each student. Since this is obviously impossible, we must try to find realistic means of giving each student as much individual guidance as possible. In framing the following proposals I have tried to allow, as far as possible, for the needs of the individual student. I have offered separate proposals for each of three stages of his development. The first concerns *library orientation*, the second offers *assistance with bibliographic methods and materials*, and the third deals with *formal instruction in bibliography* as a field of study in its own right, apart from any particular discipline. Finally I have offered a few recommendations regarding the support and control of the program.

PROPOSALS FOR A PROGRAM OF LIBRARY INSTRUCTION

Library Orientation

A. Program

1. The student with little or no acquaintance with a large library needs first to be stimulated to explore and expand his view of the library and its resources. For him I recommend a *Library Handbook* which describes briefly and attractively the services and resources which the Library offers. This would be distributed primarily *outside* the Library (mailed to new students, made available in the Trident Lounge, Counseling Center, etc.) as an inducement to visit and explore.

2. Once in the Library, he needs help in orientating himself. Here I recommend a self-guided tour following a marked path through the building. A sheet giving a brief explanation of the major points along the route would be provided. The student could take this tour at a time convenient to him and proceed at his own pace.

3. Class tours and lectures would continue to be available at the request of instructors. For classes wanting a general introduction to the

library, I recommend having ready a demonstration which focuses upon a particular topic and emphasizes the variety of the materials available. (I see this as similar in form to the fourth lecture of the present Telecourse.) Given "live" at first, to allow for changes indicated by class response, it might, when perfected, be put on tape and offered as a substitute for the present Telecourse. A librarian-instructor would be present, however, to answer questions, lead discussion, or conduct a brief tour of the building, as appropriate. This prepared demonstration would not, of course, rule out the possibility of custom-made tours for special groups or purposes. To the extent that we are able to handle the demand for such a demonstration it might be actively promoted and advertised among instructors of appropriate courses.

4. I recommend also that a laboratory library be developed to serve as a model of the larger library and to offer examples of the kinds of library resources in the general collection.

5. It is recommended also that a workshop or clinic on techniques of library research be offered on an experimental basis. This would be open to all interested students independent of any course or requirement.

B. Responsibility

A co-ordinator would be responsible for developing the handbook, the self-guided tour, the demonstration, the workshop or clinic, and the laboratory library, with the help of an advisory committee appointed by the College Librarian. This committee, to be composed of librarians and representatives from the faculty and student body, would, from time to time, review the program, and would direct evaluation reports to the College Librarian. Librarians would assist in presenting the demonstration.

Assistance with Bibliographic Methods and Materials

A. Program

1. For the student learning to use the library for a particular purpose, e.g., gathering materials for a report or paper, I recommend instead of one comprehensive course, a number of mini-courses which focus on specific library problems. (For example: how to find book reviews; locating biographical information; outstanding bibliographical works in a particular subject field.) These might take the form of printed bibliographies or guides such as have been prepared by members of the library staff. Presentations by means of slides and/or tapes might

be set up for use where they are needed; e.g., an explanation of the Library of Congress subject heading list near the subject catalog. Possibilities of computer-assisted instruction might also be explored.

2. Group presentations (tours, lectures, demonstrations) for classes wanting library instruction in specialized subject areas would continue to be offered by reference librarians at the request of the instructor. The laboratory library and a selection of audiovisual equipment would be available for such presentations. It is hoped that the librarians concerned would experiment with new methods and materials and take the initiative in developing and promoting such presentations for their own subject areas.

3. The Library would make available special tutorial assistance in bibliography and the use of the library, on an experimental basis, to students enrolled in selected courses. Students with special problems in their approach to the library (e.g., foreign students) might also be offered tutorial assistance.

B. Responsibility

Specialized presentations and publications would be the responsibility of the reference librarians in their own subject areas. (In special cases librarians might be drawn from other areas of the Library.) Scheduling, duplicating, and general coordination would be handled centrally by the co-ordinator. The committee would be available to advise concerning this phase of the program and would review and evaluate it.

Instruction in General Bibliography

A. Program

For students or groups engaged in serious and extensive research (graduate students, honor students, etc.) I recommend formal instruction in bibliography as an independent field of study. The objectives of such instruction would be to bring the fragments of the student's bibliographic knowledge into a meaningful pattern; to offer concepts by means of which he may organize and assimilate the mass of current bibliographic publication; to give, through the perspective of historical bibliography, a glimpse of the unity of the scholarly enterprise; and to prepare the student to understand and deal with new developments in bibliography.

Such instruction will have meaning only after the student has had considerable bibliographic experience. Specific topics to be considered

might include the functions of bibliography, both historically and in the modern context; forms of bibliography (national and trade bibliography, retrospective bibliographies, reviews of research, etc.); the future of bibliography (automation, information networks, miniaturization, etc.).

B. Responsibility

This type of instruction might be offered as one or more lectures within the context of an appropriate course, e.g., a course in methods of research, at the request of the instructor. The success of this phase will depend upon finding faculty who accept and appreciate its goals. Responsibility for this phase, at lease in its initial stages, would rest with the coordinator, with the advice of the committee.

RECOMMENDATIONS FOR SUPPORT AND CONTROL

In addition to the above proposals, I would like to make the following recommendations regarding the support and control of the program generally.

1. If the program is to be successful it must have strong faculty support, and this should be won through a sound program which commands respect. It is preferable to deal through individual faculty members and selected courses rather than to try to present a large-scale plan at the departmental level.

2. Support within the Library should have the broadest possible base. The program should not depend upon the whims and enthusiasms of one person. Reference librarians would participate as part of their assigned duties. Also, a committee of librarians, with representatives from the faculty and student body, should be appointed to advise the coordinator and to review the program from time to time. The committee, however, should have no responsibility for administering the program.

3. Continuing financial support should be assured, since the program may take years to reach its full potential. It is essential that the program not be regarded as an expendable "frill." Space should be allowed and staff and equipment budgeted as part of the on-going work of the Library.

4. Control of the program should be centered in the Library. Within the Library it should be centralized in a coordinator who would schedule tours, lectures, demonstrations, etc., and take general responsibility for administering the program.

CONCLUSION

It may seem that the radical posture recommended by Marat has not produced correspondingly radical proposals. Most of the measures I have recommended have, of course, been tried before. But a revolution is no less a revolution because it uses old forms, if it charges them with new spirit and purpose. I venture to predict that the revolution in this area, when it comes, will be less concerned with new methods and more with a realistic and empathetic relationship between the librarian and student and a clearer perception of their mutual purpose. "The important thing is to pull yourself up by your own hair. . ."

1. I am referring, of course, to Sylvia Ashton-Warner's *Teacher* (New York: Simon & Schuster, 1963).

Simulated literature searches

by Beulah C. Howison

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For the reference libarian, the abysmal ignorance of the average college student concerning even the more elementary reference sources is beyond reasonable belief. The richness of materials available, contrasted with student's ignorance of their existence creates, in itself, an anomaly difficult to accept. Indeed, it seems unnecessary to accept it.

The personal frustrations experienced by seniors and graduate students are evidenced in remarks such as these: "How was it no one ever told me about *Chemical Abstracts*?" "If I had only known about the *American National Standards* last year!"; and "Why doesn't someone teach us about these materials?" These questions reintroduce the perennially frustrating problem: How do we help our students become more knowledgeable about library resources? How do we give them more skill in their use?

In the past, we have felt alone in our concern for these students, who, not brave enough to ask for help, never reached their potential because of their ignorance of standard, readily available sources. The skills to use these sources do not come automatically. We are not born with them, nor do we acquire them by osmosis. *Awareness* of available research materials should be a first step, followed by *instruction* in their use.

How do we provide students the opportunity to discover these steps? The teaching faculty is always the catalyst in accomplishing the first and often the second step. The student who works with a professor who reads and uses the library is gradually led into reading and using the library himself.

About ten years ago, just such a professor requested instruction for her students in the sources of the research studies in experimental

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places each objective on a slide as an introduction to the section in which the material to achieve this objective is presented.

This has required some rearrangement as well as rewriting of objectives. Vaguely worded objectives may sound "great" on a sheet labelled "Objectives." When placed in juxtaposition with the sources to aid in their achievement they may appear as sheer balderdash!

Figure 1 (top) shows an example of one objective in Power Technology. The student cannot become proficient in the use of these

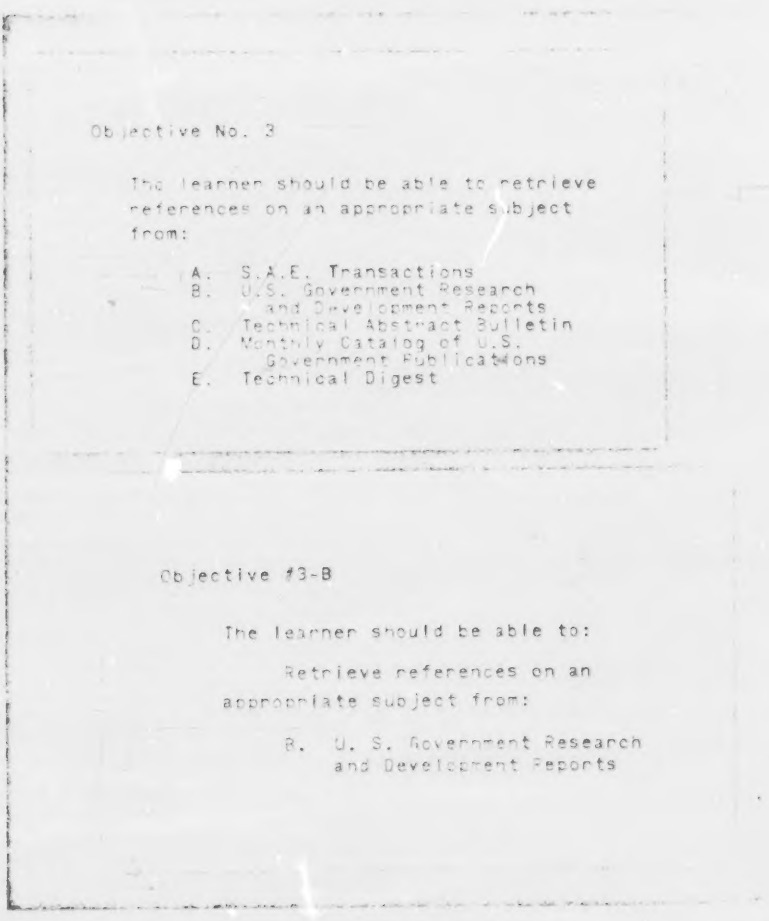
Objective No. 3
The learner should be able to retrieve references on an appropriate subject from:
A. S.A.E. Transactions
B. U.S. Government Research and Development Reports
C. Technical Abstract Bulletin
D. Monthly Catalog of U.S. Government Publications
E. Technical Digest
Objective #3-B
The learner should be able to:
Retrieve references on an appropriate subject from:
B. U. S. Government Research and Development Reports

Fig. 1 Slides stating objectives

indexes by listening to the lecture and viewing one set of slides. He may learn a basic method for locating references—at least he may become aware of the existence of these sources. Skill in using these indexes comes as a result of continued use. The slide shown in Figure 1 (bottom) introduces the section on the *U.S. Government Research and Development Reports.*

2. Preparation of the bibliography.

Selection of only basic titles for the slide series seems desirable. Too comprehensive a list may overwhelm the student and so discourage his even trying to retrieve references. Often additional titles are listed on the bibliography. A student who feels happy over references he has found by using a basic source may scan the bibliography for additional leads. Call numbers are given in the bibliography and those titles discussed in the slide series are marked with an asterisk. Each student receives a copy of the bibliography.

3. Selection of an appropriate subject for a simulated literature search.

4. Identification of examples from each source to illustrate special problems.

These two procedures need to be treated as a unit as it is not always possible to identify references from every index on a single subject or on ones that are related. The subject should be in the area of study as students tend to ignore any index that has been described unless the examples seem relevant.

For this sequence, "Internal Combustion Engines" was selected and further limited to "Rotary Internal Combustion Engines."

5. Preparation of the outline for the lecture.

6. Composition of the script for the lecture.

Each of these activities follows usual procedures and requires no discussion. Story boards which display copy for each frame with the narration adjacent is a satisfactory form for the lecturer as this brings the content of each slide before the speaker at the same time it is on

foods. As this was a small laboratory class, it was possible to give students photocopied examples of types of citations which supplemented the books, indexes, and abstracting services which were brought into the classroom. This lecture has been revised frequently and is given each semester.

This program was expanded to include other courses such as Advanced Food Science, Family and Marriage in a Democratic Society, and Family Health. Many of the classes were large and met in multiple sections. Providing each student with photocopied examples of the references necessary for a simulated literature search was not entirely successful because of the uncertainty of whether students were looking at the citation under discussion. Time away from the reference desk, and transportation of these cumbersome materials to the classroom were also problems. The results were encouraging but the larger program needed a more sophisticated approach.

In collaboration with A-V personnel, a "pilot project" was initiated to explore the capabilities of colored slides in teaching the literature of Advanced Food Science. Periodical indexes, abstracting services, government publications and special books were studied, a script written, and the slides and tapes prepared. The first experience was so well received by both students and faculty that similar lectures were produced for Power Technology, Modern Art, and the experimental section of Inorganic Chemistry. The presentations range from an hour and a half to three hours.

In the course of preparing new slide lectures, we gain insights into the techniques of producing simulated literature searches. A successful literature search appears to be the result of a skillful meshing of disciplined work habits with a knowledge of basic and sophisticated sources. An attempt must be made to show students that disciplined work habits encompass:

1. The selection of a subject, which must be limited to accommodate its purpose and to permit it to be defined in precise terms.

2. The establishment of boundaries. How extensive shall the study be? Total? One reference? A five-year period? Early decision is desirable as it allows the researcher to chart his course and budget his time.

3. The preparation of a word list which identifies the keys to the indexes. At this point, failure may occur, should the terms on the word list not be those used in the index.

A disciplined searcher:

1. keeps a record of the subjects used
2. keeps a record of the sources checked
3. writes complete and accurate citations to use for bibliography preparation
4. uses the index, if available, even though the arrangement is alphabetical
5. follows up all pertinent cross references
6. develops the habit of using footnotes and bibliographies
7. learns the meanings of abbreviations

In creating a simulated search, providing a knowledge of basic sources or bibliographies is the next concern. What are the titles of the indexes, abstracting services, and reference books which will be useful? Where are they located? What do they look like? What do they contain? How are they arranged? And last, the desired reference having been identified, how are they to be retrieved?

Our preparation of a lecture on the literature of a field follows this general pattern:

1. Identification of behavioral objectives.

In writing behavioral objectives, Robert F. Mager's *Preparing Instructional Objectives* has been extremely helpful. For additional background, the reports on research of programmed instructional techniques as reported in *Research in Education* were valuable. James W. Popham's recent books in the field of instructional goals and instructional sequences are interesting and informative.

Each student is given a copy of the objectives at the beginning of the lecture. The objectives must be understood because they describe what the student should be able to do as a result of the presentation. It seems probable that he may not associate the sources discussed with the objectives desired. An experiment is now being initiated which

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the screen. Our storyboard sheets are 8-1/2 x 11 with spaces for three frames. Ordinarily there is ample space for the narration. (Fig. 2)

7. Development of the content of each frame.

At this point, the entire content as planned for each frame is placed on individual sheets. The requirements determine the form - photocopied examples, typed copy, or hand-written copy. The frames are numbered to correspond with the numbers on the script and essential directions are supplied.

Slides are prepared for two types of learning situations:

A. Locations of

1. Public services area

2. Card catalog

3. Reference books, periodical indexes, and abstracting services (Fig. 3)

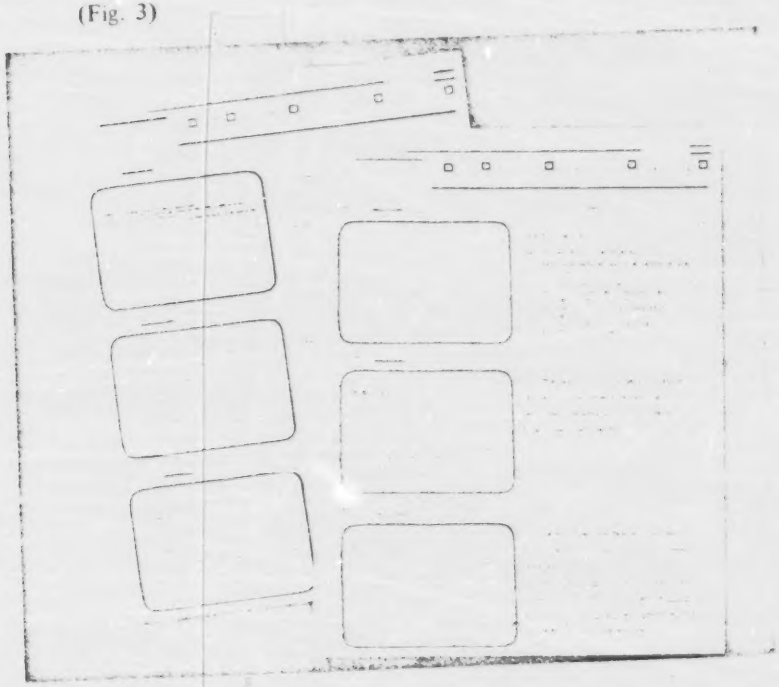

Fig. 2 Storyboard sheets

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4. Current periodicals and current periodicals print-out
5. Files of older periodicals and periodical holdings file
6. Microform room and equipment

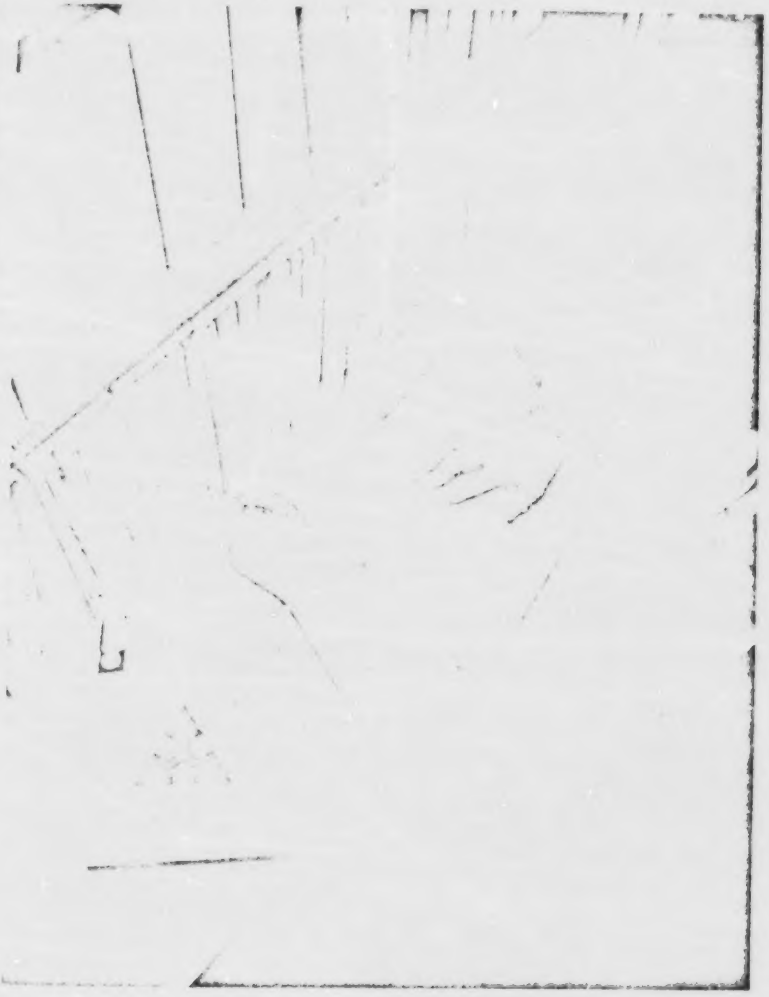

Fig. 3 Slide illustrating location

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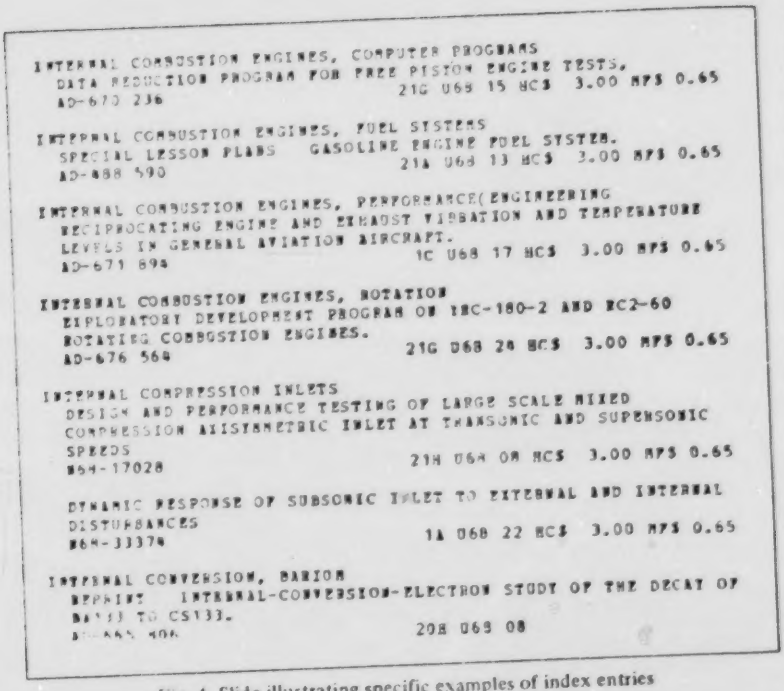

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INTERNAL COMBUSTION ENGINES, COMPUTER PROGRAMS
  DATA REDUCTION PROGRAM FOR FREE PISTON ENGINE TESTS.
  AD-670 236                          21G U65 15 HC$  3.00 MF$ 0.65

INTERNAL COMBUSTION ENGINES, FUEL SYSTEMS
  SPECIAL LESSON PLANS   GASOLINE ENGINE FUEL SYSTEM.
  AD-888 590                          21A U68 13 HC$  3.00 MF$ 0.65

INTERNAL COMBUSTION ENGINES, PERFORMANCE(ENGINEERING
  RECIPROCATING ENGINE AND EXHAUST VIBRATION AND TEMPERATURE
  LEVELS IN GENERAL AVIATION AIRCRAFT.
  AD-671 894                          1C U68 17 HC$  3.00 MF$ 0.65

INTERNAL COMBUSTION ENGINES, ROTATION
  EXPLORATORY DEVELOPMENT PROGRAM ON YRC-180-2 AND RC2-60
  ROTATING COMBUSTION ENGINES.
  AD-676 568                          21G U68 24 HC$  3.00 MF$ 0.65

INTERNAL COMPRESSION INLETS
  DESIGN AND PERFORMANCE TESTING OF LARGE SCALE MIXED
  COMPRESSION AXISYMMETRIC INLET AT TRANSONIC AND SUPERSONIC
  SPEEDS
  N68-17028                           21H U64 08 HC$  3.00 MF$ 0.65

  DYNAMIC RESPONSE OF SUBSONIC INLET TO EXTERNAL AND INTERNAL
  DISTURBANCES
  N68-33376                           1A U68 22 HC$  3.00 MF$ 0.65

INTERNAL CONVERSION, BARION
  REPRINT   INTERNAL-CONVERSION-ELECTRON STUDY OF THE DECAY OF
  BA133 TO CS133.
  AD-685 406                          20E U69 08
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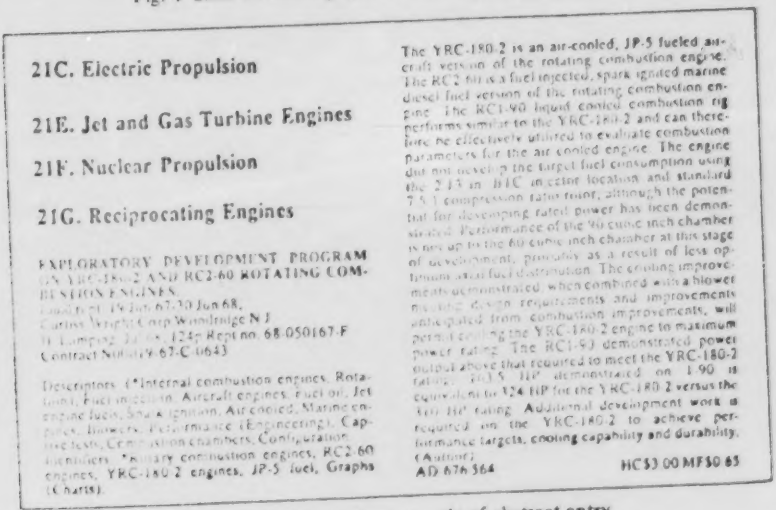
Fig. 4 Slide illustrating specific examples of index entries



21C. Electric Propulsion

21E. Jet and Gas Turbine Engines

21F. Nuclear Propulsion

21G. Reciprocating Engines

EXPLORATORY DEVELOPMENT PROGRAM ON YRC-180-2 AND RC2-60 ROTATING COMBUSTION ENGINES.
Final rept. 19 Jun 67-30 Jun 68,
Curtiss-Wright Corp Woodridge N J
W Lamping, Jul 68, 124p Rept no. 68-050167-F
Contract Nonr(C) 67-C-0643

Descriptors (*Internal combustion engines, Rotating), Fuel injection, Aircraft engines, Fuel oil, Jet engine fuels, Spark ignition, Air cooled, Marine engines, Diesel, Performance (Engineering), Capacities, Tests, Combustion chambers, Configurations, Efficiencies, *Rotary combustion engines, RC2-60 engines, YRC-180-2 engines, JP-5 fuel, Graphs (Charts).

The YRC-180-2 is an air-cooled, JP-5 fueled aircraft version of the rotating combustion engine. The RC2-60 is a fuel injected, spark ignited marine diesel fuel version of the rotating combustion engine. The RC1-90 liquid cooled combustion rig performs similar to the YRC-180-2 and can therefore be effectively utilized to evaluate combustion parameters for the air cooled engine. The engine did not develop the target fuel consumption using the 2.13 in. BTC injector location and standard 7.5:1 compression ratio rotor, although the potential for developing rated power has been demonstrated. Performance of the 90 cubic inch chamber is not up to the 60 cubic inch chamber at this stage of development, primarily as a result of less optimum axial fuel distribution. The cooling improvements demonstrated, when combined with a blower matching design requirements and improvements anticipated from combustion improvements, will permit cooling the YRC-180-2 engine to maximum power rating. The RC1-90 demonstrated power output above that required to meet the YRC-180-2 rating. The 5 Hr. demonstrated on 1.90 is equivalent to 324 HP for the YRC-180-2 versus the 320 Hr. rating. Additional development work is required on the YRC-180-2 to achieve performance targets, cooling capability and durability. (Author)

AD 676 564 HC$3.00 MF$0.65

Fig. 5 Slide illustrating example of abstract entry

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Work Sheet #18 and #19.

18. The U.S. Government Research and Development Reports is an index to a portion of the reports of federally supported research projects.

19. The title of a study concerning internal combustion engines, notation is Exploratory Environment Program by YRC-170-2 and C-2-62 Stirling Combustion Engine.

Work Sheet #20 through #22

20. AD 670 924 is the number of this report.

21. The Pierce Library owns or has access to microfiche copies of these reports

22. You need to know the number of the report in order to retrieve it.

Fig. 6 Example of worksheets completed by students during presentation

B. Specific examples from reference tools
   1. Bibliographic citations (Fig. 5)
   2. Index entries (Fig. 4)
   3. Cross references
   4. Abstracts (Fig. 5)
   5. Patent literature
   6. Bibliographies

8. Organization of the work sheets.

The work sheets when completed provide a complete set of notes on the lecture. Each student should receive a copy at the beginning of the presentation. An example of a typical item on the work sheets for Power Technology may be found in Figure 6.

Completion of the work sheets was the point at which the most difficulty was encountered. Experience has demonstrated the essential need for work sheets: (1) they keep the listener involved, and (2) they provide a set of notes for future use.

The plan of simultaneously completing the work sheets, listening to the lecture, and viewing the screen proved untenable. The attempt to do this caused enormous student frustration. Pausing at various points to allow the work sheets to be completed produced a more positive student response but was very time consuming and not entirely satisfactory. Finally, each section of the work sheet was placed on slides. The statements were typed in black on a white background and the blanks were completed in cursive writing with red ink.

As soon as the plans are in final form, a conference with the Coordinator of Photography, the Coordinator of Graphics and Media, and the Staff Photographer to finalize production details is essential. Both the overall plan and the individual divergencies must be thoroughly understood before these specialists can use their expertise to develop visual images to clarify and enhance the spoken word.

Color slides and high contrast slides in 35mm format were used to visualize the series content. Since readability is a most important factor in a projected image, great care was taken to eliminate extraneous material. Where exact page format was important, two slides were used, one to show an overall view, the second a close up of the specific entry.

Color coding to add interest and variety to the slides was used in three of the series. Highlighting specific sections was achieved by not applying the color to those areas.

After the slides have been received and proofed (Fig. 7) and all is ready for presentation, the time for taping has arrived. The excellent recording voice of one of the librarians produced a pleasing tape recording of the first lecture—Advanced Food Science. Unfortunately, the tape equipment to advance the slides did not always perform as dependably as the narrator.

At this time, with improved taping equipment, our plan is to have a duplicate set of these lectures as slide-tape presentations available for individual or group use. Carrels equipped with slide projectors and playback units are available in the reference area. These sets will be useful for review or for those who did not attend the lectures.

Preparing a simulated literature search on slides is a very time-consuming enterprise. The lectures need constant revision as reference

Fig. 7 Final inspection of slides

materials are changed and expanded and as the producers gain new insights.

Lacking the professional and technical expertise of first-rate audio-visual specialists, this type presentation could not be accomplished. Without their warm, personal encouragement the completion of the programs would have been much more difficult.

Assessing our program at this point we cannot help feeling there is great potential for these simulated literature searches. Yet we are also painfully aware that the percentage of students reached through these lectures is still infinitesimal. (The importance of the teaching faculty as a catalyst is still valid.) The statement by an art professor that students produced term papers of higher quality after the lectures than had been his earlier experience is heartening. Heartening, too, has been the realization that much of the time formerly spent in showing the same basic reference tools to individual students, can now be used to better advantage.

However, the greatest satisfaction has been in noting that whenever these slide series have been used, students come in increasing numbers

to use reference materials, often stopping to express their approval of this new approach and the help it has provided them.

With high hopes the experiments continue.

Mager, Robert F. *Preparing Instructional Objectives.* Palo Alto, California: Fearon Publishers, 1962.

Popham, W. James, and Baker, Eva L. *Establishing Instructional Goals.* Englewood Cliffs, New Jersey: Prentice-Hall, 1970.

———. *Planning an Instructional Sequence.* Englewood Cliffs, New Jersey: Prentice-Hall, 1970.

Research in Education. Washington, U.S. Office of Education, National Center for Educational Communication, Educational Resources Information Center, 1966–.

Schaler, Charlotte M., and Smith, Julian F. "Sound and Unsound Short Cuts in Searching the Literature." In American Chemical Society, *Literature Resources for Chemical Process Industries.* (Advances in Chemistry Series, No. 10. p. 441-448.) Washington, D.C.: The Society, 1954.

Smith, Julian F., and Schaler, Charlotte M. "Basic Principles of Literature Searching." In American Chemical Society, *Literature Resources for Chemical Process Industries.* (Advances in Chemistry Series, No. 10. p. 438-440) Washington, D.C.: The Society, 1954.

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professional activities and literature

The problems, goals, interest, and support of a movement are thought to be reflected, to some extent, by the frequency, sponsorship and topics of professional meetings, such as conferences, workshops, etc.; by the activities of major professional organizations; and by the professional literature. In this section we have two articles reviewing these indicators–Helen M. Brown, Chairman of the Committee on Instruction in the Use of Libraries of the American Library Association, examines the activities of this organization; and Allan Mirwis has prepared a bibliography of literature on academic library instruction for the period 1960-1970.–Ed.

ala activities to promote better instruction in the use of academic libraries

by Helen M. Brown

The opportunity the American Library Association offers for programs directed to a nation-wide audience constitutes a major contribution to the exploration of library problems of all kinds. The concern of academic librarians for the instruction of students in the use of libraries has been recognized by programs of the Association of College and Research Libraries. Examples are the joint program of ACRL's College Library Section and Junior College Libraries Section in Washington on June 26, 1959, "Teaching Students to Use the Library," and the ACRL general session program, "Effective Library Use by Students–Fact or Fiction," cosponsored by the ACRL Library Services Committee, Subject Specialists Section and University Libraries Section, in St. Louis, 1964. At the Atlantic City Conference of ALA in 1969, the ACRL College Libraries Section and the Junior College Libraries Section held another joint program meeting on the topic, "Library Instruction for the Undergraduate Beyond the Orientation Level."

The ALA Chicago Conference of 1963 featured a three and one-half day Conference-Within-a Conference, "An Inquiry into the Needs of Students, Libraries and the Educational Process." One hundred twenty-two study-discussion groups offered participants the opportunity for joint analysis of the requirements for meeting the rising tide of students. Of the ten recurring conclusions emerging from the groups, one was "Fresh approaches must be made to instruction in the use of

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libraries on the part of students." The thinking stressed the need for an approach at the national level and called for exploration of newer audio-visual methods including the possibilities of teaching machines and programmed instruction.[1]

Also under the ALA umbrella was a preconference institute on Newer Methods and Media for Library Orientation held in New York City, July 9, 1966; it was sponsored by the ACRL Committee on Library Services and the Library Administration Division, Buildings and Equipment Section, Equipment Committee, and cosponsored by the American Association of Library Schools, the Library Education Division, and Reference Services Division, with the support of the American Association of School Librarians.

The first continuing ALA activity on behalf of student instruction was brought into existence by a school library specialist. The Committee on Professional Status and Growth of the American Association of School Librarians had completed a survey of the kind and amount of preparation given to prospective teachers in a group of institutions of higher education offering programs of teacher education. The somewhat dismal results of the survey[2] led Mary V. Gaver, then President-Elect of ALA, to organize a meeting in Washington, D.C. in April, 1966 between representatives of ALA and of the American Association of Colleges for Teacher Education. The meeting was called for the purpose of an informal exploration of the possibilities for cooperative action. Despite the fact that the original intention had been to focus on the pre-service education of teachers in the use of library materials, the discussion kept returning to the instruction of students, especially college freshmen. After the meeting, the ALA representatives suggested to Miss Gaver that an Ad Hoc Committee on Instruction in the Use of Libraries be set up to continue this kind of exploration and to recommend feasible action.

In her inaugural address, "Masters of the Raging Book?" delivered in June 1966, President Gaver identified as one of the major areas of concern during her year in office, "the area that might be bounded like a rectangle by the topics of recruitment, instruction in the use of libraries, library education and manpower utilization."[3]

In June 1967, the Ad Hoc Committee brought its report to the ALA Council. Although the Committee believed it was presenting a report[4] of great educational and social import, the ALA Council accepted it with only one comment! A gentleman from Toronto,[5] an advocate of direct information supply to students, rose to declare the Committee was on a collision course with futility.

At least one recommendation of the Ad Hoc Committee was immediately implemented by the appointment of a standing ALA Committee on Instruction in the Use of Libraries.

The Committee has as its function:

> to review on a continuing basis activities within ALA on instruction in the use of libraries and to coordinate them with the activities of other agencies; to recommend activities to the appropriate units of ALA and to encourage their implementation; to coordinate these activities within the Association; to conduct studies or promote research of more than divisional concern; and to act as a clearing house for information on significant programs of instruction.

The clearing house function has proved to be especially important to academic librarians. The Committee has identified and solicited the kinds of materials needed at Headquarters for the ALA Staff Liaison to answer questions and requests for information received in the area of instruction in the use of libraries. These include lists of audiovisual materials for teaching the use of the library, tests of library skills, outlines of courses of study for teaching library skills and lists of references on teaching the use of the library. (Academic librarians who have imaginative programs are urged to send pertinent materials to Agnes Reagan, Staff Liaison, ALA Committee on Instruction in the Use of Libraries at ALA Headquarters.)

The members of the Committee have also received numerous letters from librarians setting up new programs and seeking information on innovative methods elsewhere. By far the greater number of our correspondents have been academic librarians.

The present Committee on Instruction believes that information on the state of the art should be disseminated not only horizontally but also vertically. Academic librarians engaged in library instruction should be aware of new elementary and secondary school library policies and practices and of public library orientation methods. To this end, the Committee invited forty persons to a meeting during the Detroit 1970 ALA Conference in which the discussion was to be directed to the recipient of library instruction as he progressed through elementary and secondary school to college and/or to life as an out-of-school adult. Background papers in the areas of school and academic libraries were presented prior to the general discussion period.

The response to this meeting was so positive that the Committee believes it has identified a service it can perform for all librarians engaged in instruction to students at any level by occasionally providing a forum for discussion during the annual conference period. Consequently, a session open to one hundred persons has been planned for

the Dallas Conference. The Committee's determinedly multi-type library approach to the problem of instruction is revealed by the questions announced for discussion during the 1971 Conference: (1) is it possible to articulate library instruction among the various levels and types of libraries in a community? (2) how can we involve teachers for the better utilization of materials and planning of library instruction? (3) how does library instruction affect the continuing education of the individual? and (4) what innovative methods and techniques can be used for motivation and instruction? Out of the first one hundred applicants registered for the meeting fifty-three were academic librarians.

Kevin Doms, the first vice-president, president-elect of ALA, who has been appointing committee members to serve beginning in his term of office, has said more persons have volunteered to serve on the Committee on Instruction in the Use of Libraries than on any other ALA committee. This is probably a good thing, for with only one exception there will be a completely new membership next year. Only the incoming chairman, Mrs. Jean Coleman, has had one year service on the Committee. Mrs. Coleman is a dynamic school library specialist who will find three academic librarians newly appointed to serve with her. Within the framework of the function of the Committee, they should serve well the interests of the college librarians engaged in instructional programs.

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1. Lowell Martin. "Lowell Martin's CWC Summary," *ALA Bulletin 57* (September 1963): 735-41.
2. Mary V. Gaver, "Teacher Education and School Libraries," *ALA Bulletin 60* (January 1966): 63-72.
3. Mary V. Gaver, "Masters of the Raging Book?" *ALA Bulletin*, September 1966, p. 796.
4. ALA Ad Hoc Committee on Instruction in the Use of Libraries, *Report*, June 1967.
5. Len Freiser, Librarian of Toronto Board of Education.

academic library instruction—a bibliography, 1960–1970

by Allan Mirwis

This bibliography is an initial attempt to identify all printed materials concerning or suitable for academic library instruction published between 1960 and 1970. Materials in four categories periodical articles, research studies and theses, general handbooks and guides, and programmed texts have been included. An expanded version of this bibliography is planned, which will contain handbooks and guides in special subject areas including those published by academic and special libraries, and audiovisual materials suitable for academic library instruction.

Periodical articles have been arranged alphabetically by the title of the journal in which they appeared and then chronologically under journal title. In this way, all the articles appearing in a particular periodical during the period covered by this bibliography can be easily read. The items in the other three categories are arranged alphabetically by the author's last name.

PERIODICAL ARTICLES

ASLIB PROCEEDINGS

Mackenzie, A. Graham. "Reader instruction in modern universities." July 1969, pp. 271-79.

ALA BULLETIN

Bartlett, Beatrice. "The Stephens College library instruction program." April 1964, pp. 311-14.

AMERICAN DOCUMENTATION

Buist, Eleanor. "Training in bibliography and information techniques for the Soviet student." October 1962, pp. 397-400.

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ANNALS OF LIBRARY SCIENCE

Krishnan, A. "Initiation of freshmen into a university library." December 1962, p. 192.

ASSISTANT LIBRARIAN

Neal, Kenneth William. "Training students in the use of a library: some basic considerations." August 1966, pp. 164-165.

AV INSTRUCTION

Rao, Paladugu V. "Library orientation: a multi-media approach at Eastern." May 1970, pp. 82-4.

CALIFORNIA SCHOOL LIBRARIES

Blumberg, Ethel L. "Library course for teachers." May 1963, pp. 22-3.

Brown, Jeanne Y., and R.R. Carter. "Mix well with media: individualization of a course on basic library procedures." January 1970, pp. 92-3.

CANADIAN LIBRARIES

Gattinger, F. Eugene. "Orienting the freshman to the library." March 1965, pp. 390-94.

Hanlon, Peter F. "Needed: student key to library resources." January 1967, pp. 270-71.

Garen, Robert J. "Library orientation on television." September 1967, pp. 124-26.

Doig, Judith. "CCTV: the second year at Windsor." July 1968, pp. 44-6.

COLLEGE & RESEARCH LIBRARIES

Alston, Annie May. "The happy medium in library instruction at the college level." November 1960, pp. 469-70.

Knapp, Patricia Blair. "The Monteith library project, an experiment in library-college relationship." July 1961, pp. 256-63.

Mathews, Sidney E. "A military college initiates a library instructional program." November 1962, pp. 482-84.

Holley, Edward G., and Robert W. Oram. "University library orientation by television." November 1962, pp. 485-91.

Josey, E.J. "The role of the college staff in instruction in the use of the library." November 1962, pp. 492-98.

Hartz, Frederic. "Freshman library orientation: a need for new approaches." May 1965, pp. 227-31.

Pritchard, Hugh C. "Pre-arrival library instruction for college students." July 1965, p. 321.

Wojik, Morca. "Academic library instruction." September 1965, pp. 399-400.

Genung, Harriet. "Can machines teach the use of the library." January 1967, pp. 25-30.

Ronkin, R.R. "Self-guided library tour for the biosciences." May 1967, pp. 217-18.

Phipps, Barbara H. "Library instruction for the undergraduate." September 1968, pp. 411-23.

Lewis, Mary Genevieve. "Library orientation for Asian college students." May 1969, pp. 267-72.

COLORADO ACADEMIC LIBRARIES

"New approaches to freshman library instruction at Colorado State." Winter 1966, pp. 22-3.

Ellsworth, Ralph Eugene. "Contribution of the library to improving instruction." Summer 1968, pp. 15-9.
"Orientation programs in Colorado academic libraries." Autumn 1968, pp. 15-23.

DREXEL LIBRARY QUARTERLY
McComb, Ralph W. "Orientation and library instruction." July 1966, pp. 248-49.

EDUCATIONAL FORUM
Gore, Daniel. "Teaching bibliography to college freshmen." November 1969, pp. 111-17.

FILM LIBRARY QUARTERLY
Sherman, Steve. "Do-it yourself for under $100, a color film of the library." Spring 1969, pp. 46-8.

ILLINOIS LIBRARIES
Wendt, Paul R. "Programmed instruction for library orientation." February 1963, pp. 72-7.
Melum, Verna V. "Library instruction in a university." June 1969, pp. 511-21.

IMPROVING COLLEGE AND UNIVERSITY TEACHING
Shou, Stephen T. "Teaching function of a university library." Spring 1962, pp. 69-71.
Sherman, John. "What is an academic library?" Spring 1964, p. 77.
Hartz, Frederic. "Freshman library orientation: a re-evaluation." Spring 1964, pp. 78-80.
Carroll, Leontie D. "Students don't need the library." Spring 1964, pp. 81-2.
Bruner, John M., and J.W. Lee. "Fact, fallacy, and the business library." Autumn 1970, pp. 292-93.

JOURNAL OF DOCUMENTATION
Line, Maurice B., and Mavis Tidmarsh. "Student attitudes to the university: a second survey at Southampton University." June 1966, pp. 123-35.

JOURNAL OF EDUCATION FOR LIBRARIANSHIP
Knapp, Patricia B. "The meaning of the Monteith College library program for library education." Fall 1965, pp. 117-27.
Allen, Kenneth W. "Use of slides for teaching reference." Fall 1965, pp. 137-39.
Holler, Frederic. "Library material without instruction: a disaster?" Summer 1967, pp. 38-48.

JOURNAL OF EDUCATIONAL RESEARCH
Joyce, William D. "Study of academic achievement and performance on a test of library understandings." January 1961, pp. 198-99.
Wendt, Paul R. "Pictorial and performance frames in branching programmed instruction." June 1962, pp. 430-32.

JUNIOR COLLEGE JOURNAL
Wheeler, Helen. "Library instruction and the junior college." April 1961, pp. 451-52.

LIBRARY ASSOCIATION RECORD
Christie, David. "Library course at teacher training colleges (letter to editor)." May 1963, pp. 203-05.
Richnell, D.T. "Hale committee report and instruction in the use of libraries."

October 1966, pp. 357-61.
Linden, Ronald O. "Tutor-librarianship: a personal view." October 1967, pp. 351-55.
Wood, David N. "Instruction in the use of scientific and technical literature." January 1968, p. 13.
Carey, R.J.P. "Library instruction in colleges and universities of Britain." March 1968, pp. 66-70.
Carey, R.J.P. "Technical information course for engineering and science students at Hatfield College of Technology." January 1964, pp. 14-20.
Dean, E. Barbara. "Television in the service of the library." February 1969, pp. 36-8.
Mews, H. "Library instruction concerns people." January 1970, pp. 8-10.

LIBRARY-COLLEGE JOURNAL
Sutton, Lee. "Teaching technique for library centered courses." Summer 1968, pp. 20-5.
Ross, Woodburn O. "The academic library: a personal view." Fall 1968, pp. 34-6.
Beswick, Norman. "Librarians and tutor-librarians: library use in British higher education." Winter 1969, pp. 12-23.
Parker, F. "Library resources for educational leaders: a class discussion." Summer 1970, pp. 31-6.

LIBRARY HERALD
Jain, H.C. "Initiation of a freshman at the university level." April 1961, pp. 3-10.

LIBRARY JOURNAL
Hertel, Robert, and others. "TV library instruction." January 1, 1961, pp. 42-6.
Joyce, William D. "Student grades and library use: a relationship established." February 15, 1961, pp. 832-33.
Josey, E.J. "Absent professor." January 15, 1962, pp. 173-75.
Gore, Daniel. "Anachronistic wizard: the college reference librarian." April 15, 1964, pp. 1688-92.
"College library gets CLR grant for teaching machine experiment." August 1964, p. 2978.
Brown, Clayton M. "TV on the herded tour." May 15, 1965, pp. 2214-18.
"Prospective teachers found ignorant of library use and resources." May 15, 1965, pp. 2348-49.
Tripp, Edward. "On library panic." October 15, 1965, pp. 4514-16.
Weatherford, John. "Temples and confessional booths." January 1, 1966, p. 70.
Moon, Eric E. "A-V showtime: preconference institute on library orientation programs." August 1966, pp. 3640-42.
"Videotape for orientation at University of Washington." October 15, 1968, p. 3740.
"Alaska orientation film made for $75.62." November 15, 1968, p. 4234.
Kennedy, James R. "Integrated library instruction." April 15, 1970, pp. 1450-53.

LIBERAL EDUCATION
Kaywood, C. Robert. "Teacher-historian and the library-teacher." May 1969, pp. 388-95.

LIBRARY OF CONGRESS INFORMATION BULLETIN
"Teaching machine on library use." July 20, 1964, pp. 366-67.

Hilker, Helen Anne. "Electronic librarian: institute on newer methods and media for library orientation." July 14, 1966, pp. 409-10.

LIBRARY QUARTERLY

Schiller, Anita R. "Reference service: instruction or information?" January 1965, pp. 52-60.

LIBRARY TRENDS

Knapp, Patricia B. "Methodology and results of the Monteith pilot project." July 1964, pp. 84-102.

Wendt, Paul R. "New library materials and technology for instruction." October 1967, pp. 197-210.

LIBRARY WORLD

Stobart, R.A. "Use of the library, or GCE." Summer 1968, pp. 55-6.

Pugh, L.C. "Library instruction programs for undergraduates: historical development and current practice." March 1970, pp. 267-73.

Revill, D.H. "Teaching methods in the library: a survey from the educational point of view." February 1970, pp. 234-39.

Crossley, Charles A. "Education in literature and library use." May 1970, pp. 340-41.

LIBRI

Power, Ellen. "Instruction in the use of books and libraries: preliminary report to the International Association of Technical University Libraries." 1964, pp. 253-63.

LOUISIANA LIBRARY ASSOCIATION BULLETIN

Greaves, F. Landon, and Dudley V. Yates. "Library orientation, varied approaches to a common problem." Summer 1968, pp. 61-4.

MAINE LIBRARY ASSOCIATION BULLETIN

Mangion, Marion B. "Need for expanded library education programs." May 1969, pp. 3-6.

MALAYAN LIBRARY JOURNAL

Knight, Hattie. "Case for library science in teacher education." November 1963, pp. 69-71.

MEDICAL LIBRARY ASSOCIATION BULLETIN

Truelson, Stanley D., Jr. "Needed: curriculum reform." October 1961, pp. 635-66.

Long, E. Croft, and Polly G. Miller. "Medical library and the medical student." July 1964, pp. 568-74.

ODDS AND BOOKENDS

Grundt, Leonard. "Program of instructional services at Nassau Community College library." Winter 1967, pp. 7-10.

PNLA QUARTERLY

Johnson, Gertrude W. "Library orientation of college freshmen." Fall (October) 1969, pp. 4-8.

PHI DELTA KAPPAN

Wendt, Paul R. "Programmed instruction for transfer to the real life situation." (In *Proceedings of the National Conference of the Implications of the New*

Media for the Teaching of Library Science. Urbana, University of Illinois, 1963. pp. 77-9).

RQ

Pritchard, Hugh. "Library orientation." Fall 1967, pp. 9-11.

Bunge, Charles A. "Library instruction studies." Winter 1969, pp. 129-30.

Larson, Thelma L. "Public onslaught: a survey of user orientation methods." Spring 1969, pp. 182-88.

SAVANNAH STATE COLLEGE FACULTY RESEARCH BULLETIN

Harrison, Madeline G. "Status of card catalog use at Savannah State College library." December 1960, pp. 5-9.

SOUTH DAKOTA LIBRARY BULLETIN

Eyres, Mildred. "Orientation of the use of the college library." October 1961, pp. 142-44.

SPECIAL LIBRARIES

Brearley, Anne. "Library handbook for metallurgy students." March 1965, p. 192.

"Library orientation film." May 1965, p. 340.

Keller, C. Warren. "Monsanto information center's audiovisual orientation program." November 1966, pp. 648-51.

Adkins, Elizabeth F. "Library orientation for student nurses: a new approach." January 1970, pp. 21-5.

TEXAS LIBRARIES

"University of Houston produces orientation film for freshmen." Winter 1964, p. 141.

TEXAS LIBRARY JOURNAL

Heineke, Charles D. "Library orientation and closed-circuit TV a Midwestern University." Winter 1968, p. 167.

TIMES EDUCATIONAL SUPPLEMENT

Cook, J. "Scientists need training in library use." September 9, 1966, p. 481.

Furneaux, A. "I do not know where to look." February 3, 1967, p. 345.

WILSON LIBRARY BULLETIN

Lightfoot, Robert M., Jr. "On issuing a . . . faculty library handbook." November 1961, pp. 234-36.

McCoy, Ralph E. "Automation in freshman library instruction." February 1962 pp. 468-70.

Alston, Annie M., and Earl Wilcox. "Freshman term paper." June 1963, pp. 858-59.

Griffith, Alice B. "Library handbook standards: students and faculty, a report of a survey." February 1965, pp. 475-77.

Wheeler, Helen. "Introducing the library through film: a list of films and filmstrips." October 1966, pp. 97-9.

RESEARCH STUDIES AND THESES

Axeen, Marina Esther. *Teaching library use to undergraduates–comparison of computer-based instruction and the conventional lecture. Final report*. Urbana, Illinois University, 1967. 113pp. (ED 014 316)

Boone, Morell D. "Experiment in library instruction: an initial step in the identification of library users' needs at a liberal arts college." (In New York Library Assn. College and University Libraries Section. *Use, misuse, and non-use of academic libraries.* Woodside, N.Y., 1970, pp. 31-41).

Fidler, Leah Josephine. *Freshman library orientation programs in small teacher-related colleges.* Bloomington, Indiana University, 1960. 75pp. M.A.)

Johnson, John Milton. *Study of United States medical school library orientation programs for medical students: a survey with a suggested program.* Chapel Hill, University of North Carolina, 1967. 55pp. (M.S. in L.S.)

Kirk, Thomas G. *Comparison of two methods of library instruction for students in introductory biology.* Bloomington, Indiana University, 1969, 62pp. (M.A.)

Knapp, Patricia Bryan. *Experiment in coordination between teaching and library staff for changing student use of university library resources.* Detroit, Wayne State University, 1964.

———: *The Monteith College library experiment.* New York: Scarecrow, 1966. 293pp.

Lincoln, C.M. (ed). *Educating the library user: proceedings of the fourth triennial meeting of the International Assn. of Technological University Libraries.* Leicestershire: Loughborough University of Technology, 1970. 138pp. (ED 044 126)

Midgett, Helen Laurie. *Study of the library training and knowledge of undergraduate students at Duke University.* Durham, University of North Carolina, 1964. 122pp. (M.S. in L.S.)

Paulson, Bruce L. *Junior college library orientation innovations.* Berkeley, University of California, 1968. 34pp. (ED 019 058)

Perkins, Ralph. *The prospective teacher's knowledge of library fundamentals: a study of the responses made by 4,150 college seniors to tests designed to measure familiarity with libraries.* New York: Scarecrow, 1965. 302pp.

Quon, Frieda Seu. *Study of library handbooks and a guide to the resources and services of the University of Mississippi library.* University: University of Mississippi, 1965. 172pp. (M.L.S.)

Reichard, Edwin Walter. *Introducing the student to the library: with special reference to the use of library handbooks.* Ann Arbor: University of Michigan, 1961. 35pp. (A.M.L.S.)

Riley, Louise Elise. *Study of the performance on a library orientation test in relation to the academic achievement and scholastic aptitude of a selected group of freshman college students at Tuskegee Institute.* Atlanta: Atlanta University, 1962. 35pp. (M.S. in L.S.)

Sandifer, Joy Y. *Bibliography of materials for library instruction at the secondary and college level: classified, annotated, and graded.* University: University of Mississippi, 1967. 79pp. (M.L.S.)

Snider, Felix Eugene. *Relationships of library ability to performance in college.* Urbana: University of Illinois, 1965. 215pp. (Ph.D.)

Snyder, Lucila. *The second kind of knowledge.* Syracuse: Inter-university Program in Teacher Education and the School of Library Science, 1964.

Wendt, Paul R. "Programmed instruction for transfer to the real life situation." (In *Proceedings of the National Conference on the Implications of the New Media for the Teaching of Library Science.* Urbana: University of Illinois, 1963. pp. 77-9).

———: *A study to determine the extent to which instruction to library freshmen in the use of the university library can be turned over to teaching machines. Final report.* Carbondale: Southern Illinois University, 1963. 81pp. (ED 003 559)

———: *To test refinements in intrinsic programming in pictorial, audio and performance frames to maximize the probability of desired terminal behaviors.* Carbondale: Southern Illinois University, 1965. 88pp. (ED 003 235).

HANDBOOKS AND GUIDES – GENERAL

Brogan, Gerald E., and Jeanne T. Buck. *Using libraries effectively.* Belmont, Cal.: Dickerson, 1969. 116pp.

Boyd, Jessie E., and others. *Books, libraries and you.* 3rd ed. New York: Scribner, 1965. 205pp.

Brown, Jeanne Y., and Robert H. Carter. *English language and literature: a workbook on reference materials.* Tustin, Cal.: Media Masters, 1969.

Learning to look it up! Pasadena, Cal.: Pasadena City College Bookstore, 1969.

Social science: a workbook on reference materials. Tustin, Cal.: Media Masters, 1969.

Canavan, P. Joseph, and Lawrence D. Parker. *The library research paper.* Dubuque, Iowa: W.C. Brown, 1965. 93pp.

Carter, Robert R. *Library skills: a workbook and reference materials.* Tustin, Cal.: Media Masters, 1968. 60 pp.

Broxson, M. *Using the library.* London: Longmans, 1966. 136pp.

Downs, Robert B., and Elizabeth C. Downs. *How to do library research.* Urbana: University of Illinois Press, 1966. 179pp.

Gahn, Saul, and Peter Spielberg. *Reference books: how to select and use them.* New York: Vintage, 1969. 312pp.

Gates, Jean Key. *Guide to the use of books and libraries.* 2nd ed. New York: McGraw Hill, 1960. 273pp.

Hook, Lucyle, and Mary Virginia Gaver. *The research paper.* 4th ed. Englewood Cliffs, N.J.: Prentice-Hall, 1969. 120pp.

Linden, Ronald O. *Books and libraries, a guide for students.* London, Cassel, 1965. 308pp.

Lyarly, Ralph H. *Essential requirements for the college research paper.* Cleveland: World, 1966. 118pp.

Markman, Roberta H., and Marie L. Waddell. *10 steps in writing the research paper.* Woodbury, N.Y.: Barron's Educational Series, 1965. 121pp.

Morse, Grant W. *The concise guide to library research.* New York: Washington Square, 1966. 214pp.

Nichol, William T. *How reference sources help us.* Chicago: Benefic, 1966. 96pp.

Perkins, Ralph. *New concept library guide.* Grand Forks, N.D.: the author, n.d. 115pp.

Pugh, Griffith T. *Guide to research writing.* 3rd ed. Boston: Houghton-Mifflin, 1968. 56pp.

Roth, Audrey J. *The research paper: form and content.* Belmont, Cal.: Wadsworth, 1966. 136pp.

Santa, Beauel M., and L.L. Hardy. *How to use the library.* Rev. ed. Palo Alto, Cal.: Pacific, 1966. 128pp.

Williams, Cecil B., and Allan H. Stevenson. *A research manual for college studies and papers.* 3rd ed. New York: Harper & Row, 1963. 212pp.

Williams, John C. *Library skill kit.* Clarks Summitt, Pa.: Logo, 1967.

PROGRAMMED TEXTS

Burrell, T.W. *Learn to use books and libraries: a programmed text.* London: Clive Bingley, 1969.

Chester, Edward G. *Library skills: references, periodicals and pamphlets.* Tustin, Cal.: Media Masters, 1966.

———. *Libary skills: the card catalog.* Tustin, Cal.: Media Masters, 1966.

Sager, Donald J. *Reference: a programmed instruction.* Columbus: State Library of Ohio, 1967. 147pp.

Webster, Felicia. *Library usage: a programmed textbook.* New York, the author 1967. 37pp.

research and experimentation

The success or improvement of a program or activity is believed to depend upon the accuracy of the premises and information upon which it is based. This section presents articles which review the research on instruction in the use of academic libraries; outline the Council on Library Resources grant program to academic libraries for innovative programs of instruction; and report on some of these Council-sponsored projects.—Ed.

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research on integrated library instruction

by Patricia A. Henning

According to Kenneth J. Brough, the idea of instructing students in the use of books can be traced to 1876;[1] and as early as 1902, President Harper of Chicago appears to have foreseen the development of library instruction librarians: "The equipment of the library will not be finished until it shall have upon its staff men and women whose entire work shall be, not the care of books, not the cataloguing of books, but the giving of instruction concerning their use."[2] During the 1930's Peyton Hurt was advocating bibliographical instruction as a graduated process carried out at different levels throughout the undergraduate years.[3] And yet, Millicent Palmer is justified in telling us in 1971 that the library profession has given little attention to the teaching function of the librarian.

Although there is almost unanimous agreement that college students should be instructed in the use of libraries and library materials, that body of knowledge identified as library science has not been enriched to any significant extent by the application of scientific research to the development of general principles of library instruction. Periodically librarians have published reviews of the literature and conducted surveys of the nature and extent of instruction programs, but seldom has anyone gone on to define specific problems, formulate hypotheses, devise experiments to test their hypotheses, and then report on the findings in professional journals. There is no doubt that lack of research has seriously limited progress in library instruction. That library instruction practitioners are eager to utilize whatever reliable information there is can be seen in their extensive use of the Monteith College Library Experiment.

Our readers have undoubtedly noticed that almost every contributor to this compendium has referred to the work of Patricia Knapp at Monteith College. Various aspects of the project have been described

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elsewhere in this publication, but its setting, objectives and scope may be unclear. Luckily, Dr. Knapp has written a succinct description which is quoted here.

> The establishment of a new college with an avowedly experimental program offers a special opportunity for a library response. Such an opportunity was provided at Wayne State University in 1959 when Monteith College was established. The University responded by assigning Patricia Knapp to work with the faculty of this new college in developing plans for library-related assignments in a curriculum of general education which emphasized the goal of helping students acquire the capacity for independent study. On the basis of initial collaboration, a proposal calling for fairly extensive experimentation and research was accepted by the Office of Education. Funds were granted for a pilot project which took as its research emphasis an exploration of the nature of librarian-faculty relationships in the collaboration. The final report on the project included not only the results of this research but also a number of by-products having to do with various facets of library-related instruction. Probably the most significant of these was a developmental sequence of library assignments designed for coordination with general education courses in the social sciences, the natural sciences, and the humanities and extending from the first term of the freshman year to the first term of the senior year. Although some of the assignments were used in the pilot project, most were not and the sequence as a whole was never implemented. [4]

It is those by-products, especially the library-related assignments, which have been utilized by librarians throughout the country. Apparently the report has been mined by practicing librarians for practical information and philosophical guidance. On the other hand, it has been virtually ignored as a foundation for extensive research into the entire area of library instruction and its effect upon students, teachers, librarians, and the institutions in which they all meet and interact. The report would seem to be a veritable handbook of methodology for research, a starting point from which to carry forward extensive experimentation. However six years have passed since publication of the report, and I find no evidence of research activity to parallel instructional activity.

It is important to keep in mind that the pilot project phase (the only phase which was completed) of the Monteith Library Program was designed as exploratory research. Dr. Knapp and her staff undertook to "explore ways of investigating" several general hypotheses. They were stated as follows:

> 1. That the student is likely to acquire library understanding and competence when his experiences in the library are functionally related

to the objectives and content of his subject courses and when this relationship is made manifest.

2. That the student's library experiences can be so related to his course work when librarians are involved from the beginning in course planning.

3. That library staff involvement can stimulate extensive exploitation of available library resources in course work.

4. That when librarians are closely involved in course development their contributions, especially in connection with the use-of-materials aspects of course content and objectives, will be valued by the faculty and will be implemented in the curriculum.

5. That most college teachers lack time and many lack bibliographical expertise to make the most of the library's potential contribution to teaching, and that providing them with bibliographical assistance will result in their making extensive use of library resources for their course work.[5]

The project did not result in a comprehensive set of findings. It did, however, enable the staff to recommend methods of research, provide models for programs, and share insights gained from the small sample studies which were conducted. It is discouraging to find that during the 1960's when research was lavishly funded and when the U.S. Office of Education listed integrating the library into the educational program as a suggested research topic, no project other than Monteith really focused on the problem. A few studies which test the use of computer-assisted instruction and programming techniques are incidentally related to the topic in that they suggest certain tools which may be used by librarians. We should not, however, delude ourselves into believing that machines are going to make the thorny problems of integrating instruction disappear. At best, educational technology may serve us after we have determined our goals, established cooperative working relations with classroom faculty, and trained library instruction specialists to develop and implement programs tailored to the needs of each local situation. Notable as it is, the Monteith study is not in itself sufficient to sustain an important specialty within academic librarianship. Continuing research is absolutely necessary.

1. Kenneth J. Brough, *The Scholar's Workshop: Evolving Conceptions of Library Service* (Urbana, University of Illinois Press, 1953).

2. Quoted in Brough, p. 153.

3. Peyton Hurt, "The Need of College and University Instruction in Use of the Library," *Library Quarterly*, July 1934, pp. 436–48.

4. Patricia B. Knapp, *The Academic Library Response to New Directions in Undergraduate Education* (ERIC Publication no. 039 390), p. 15.

5. Patricia B. Knapp, *The Monteith College Library Experiment* (New York, Scarecrow Press, 1966), p. 130–31.

Council on Library Resources activities

by Patricia A. Henning

The Council on Library Resources awards grants to organizations or individuals proposing research programs or demonstration projects directed toward the solution of library problems. The Council is particularly interested in the problems of research libraries and in the past has devoted considerable attention to the application of the new technology to libraries.

President Fred C. Cole, in his introduction to the Council's fourteenth annual report, expresses his belief that there is "insufficient understanding of the important contribution libraries make to our society" and goes on to blame "some librarians [who] are apparently wholly satisfied with their loneliness" for failing to communicate with their associates outside the library walls. It would seem that an excellent way to increase understanding of the role of libraries in our academic institutions would be through involvement of students, teaching faculty and librarians in library-centered educational programs. And so the Council in cooperation with the National Endowment for the Humanities invited several carefully selected colleges and universities to submit "creative yet practical proposals" for programs designed to bring the library further into a central role in the education of undergraduates. Thus far the two organizations have announced joint grants totaling $350,000 to Brown University, Providence, Rhode Island ($100,000); Dillard University, New Orleans, Louisiana ($50,000); Jackson State College, Jackson, Mississippi ($50,000); Eastern Michigan University, Ypsilanti, Michigan ($50,000); Hampshire College, Amherst, Massachusetts ($50,000); and Washington and Lee University, Lexington, Virginia ($50,000). The Council in a separate action made a similar $50,000 grant to Wabash College, Crawfordsville, Indiana. The grants are being matched by the institutions, bringing the total investment in the five-year programs to $800,000.

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Generally, the model library projects are designed to demonstrate ways in which the academic library can move toward realization of its potential for education and learning in an undergraduate environment. They propose to do this by involving their public in the planning, development and implementation of the program. Responsibility for leadership in some cases rests with librarians, as at Eastern Michigan, and in other cases with the faculty, as at Washington and Lee.

The most recently funded program, Washington and Lee, calls for liaison professors from selected departments to teach intensive bibliography courses dealing with the resources in their field. The other program in which course-related bibliographic instruction is a major component, Eastern Michigan, has librarians doing the instructing. A comparative study of these two approaches might help to resolve the argument over who should teach subject bibliography—teaching faculty or librarians.

Several of the model library projects call for use of student assistants to man the reference desk, prepare bibliographic guides, aid faculty seminar leaders, and provide liaison between the library and the faculty. At Brown, eight graduate reference fellows prepare brief guides to the literature in their area of concentration, work closely with professional reference librarians to provide in-depth service to undergraduates and attempt to link the library and teaching staff. At Wabash and Dillard undergraduate students trained in library use are expected to relate the library to freshman seminars. Hampshire plans intensive use of students in reference situations in and outside the library. This is another area where useful knowledge can be developed by comparing the effectiveness of various methods of selecting and training student participants and by collecting data on the backgrounds and personal characteristics of successful student reference assistants.

Funding of these model library programs has been interpreted as one indication that greater attention is being given to promoting effective use of library resources in institutions of higher education. However, librarians who are optimistic about learning from the experiences of those participating in the demonstration projects will be disappointed unless the participating institutions resolve to study their programs and report objectively on their successes and failures to an extent unprecedented in library literature. All too often, elaborately devised or technologically sophisticated programs are announced in the literature never to be heard of again. Progress reports are rare; death notices and post-mortem examinations, nonexistent.

It is encouraging that Hampshire College intends to develop and conduct its programs with a careful eye to their transferability. By conducting research, sharing instructional materials, and serving as a clearinghouse, Hampshire can contribute greatly to our all too meager store of knowledge about how libraries can respond to the needs of their community. Hopefully other libraries will follow their example. This could open a new area of interlibrary cooperation.

In an effort to obtain up-to-date information on the innovative library-centered educational programs which are being funded by the Council on Library Resources, the grant recipients (except Washington and Lee University) were invited to report on the implementation of their programs.[1] The following articles represent their response.

1 The grant to Washington and Lee was announced after our deadline for soliciting manuscripts.

library outreach: the program at eastern michigan university

by A. P. Marshall

A real concern exists among academic librarians for the lack of knowledge of library resources, often thought of as the educated man's stock in trade. Although reference materials are selected with care and concern for the student's needs, many never learn their potential value.

There is an even more far-reaching dimension to the problem. The student who has no understanding of the available resources and how they can contribute to his classroom performance is less likely to be motivated to do better work. Much time can be wasted when one does not know where to look for information. The fact that bits of information can be ferreted out from known sources provokes an independent feeling and instills pride as general goals are pursued or specific objectives of a particular course are sought.

A major concern of the Library Outreach Program at Eastern Michigan University during the first year of its operation has been the large number of students who have little understanding of what librarians sometimes call the keys to the collection. Even the use of the catalog can be baffling to a student who has not had the benefit of using or understanding its use while in high school. Though most students have used encyclopedias, dictionaries, and perhaps a few other references, their understanding of materials of a more sophisticated nature is often wanting. Sometimes his request of librarians (or persons he thinks are librarians) evokes responses which are unpleasant. Such experiences tend to "turn off" the novice library user, who never realizes his opportunity to develop an appreciation for what libraries and librarians can contribute to his educational development.

A second and just as important concern was the evident lack of appreciation by teaching faculty for the librarian's special training and expertise as a partner in the educational process. Librarians are

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sometimes invited to speak to classes on the use of the library, but seldom are they depended upon to suggest materials for the benefit of students. Some teachers make very little use of library resources themselves and are in no position to direct students to librarians who can help, nor do they always know the best sources for particular information. This failure to accept librarians as partners sometimes finds teachers categorizing these professionals as somewhere above a clerical employee but beneath a teacher.

Some librarians who were assigned to oversee the development of the collection in a particular subject area knew little about goals and objectives of departments, nor did they understand individual teaching methods. Only a few teachers were known to librarians, even by name. Unless teachers found the time to visit the library and make themselves acquainted, they remained strangers. This situation tended to cause librarians to remain isolated and to feel that they were not appreciated by their teaching colleagues.

Since librarians have enjoyed full and complete faculty status and rank for several years, only the gap between the theoretical and the practical had to be bridged. Approximately one-third of the library faculty members hold double master's degrees, with another one-third having some proficiencies in one or more subject fields. Operating on the divisional system, each librarian was assigned to cooperate with faculty in one to three subject areas in collection development. The institution of a Library Outreach Program concept was primarily a job of selling teachers on the utilization of librarians' ability and training, and strengthening the clerical staff to relieve librarians to work more closely with teachers.

The program as organized has five major objectives:

1. Providing every student the opportunity of understanding basic library resources and their uses in the facilitation of learning.
2. Exploration of methods for helping students to achieve the greatest understanding of basic library resources.
3. Identification of contributions which librarians are prepared to make for the benefit of teaching faculty so that the learning experiences of students might be enhanced, and cooperation in their attainment promoted.
4. Recognition and demonstration of the part librarians are prepared to play in the motivation of students through knowledge of the use of library resources.

Two librarians are presently assigned to work in the Library Outreach Program with primary responsibilities for orientation of

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freshman and sophomore students. Meanwhile, all professional librarians are being urged to spend as much time as possible visiting with individual faculty members, attending departmental meetings, and learning as much as possible about teacher-established goals and departmental objectives. Orientation librarians are encouraged to meet as many classes as possible, particularly on the freshman and sophomore levels. When requests become excessive, or when the classes to be met are in the upper division, other librarians are requested to make these appointments. In the meantime, efforts are being made to strengthen the number of clerical employees and library technicians to relieve professionals for more professional responsibilities.

Another objective developed as the program got under way. Instead of talking to students in a general way about library resources, all talks to students are geared to current assignments. When a teacher assigns students to write brief themes on "Air Pollution" or "Primitive Religions," each student in the class is provided with a guidesheet which suggests the major sources through which bibliographical materials may be found. Usually they were directed to the card catalog with suggestions of subjects under which to look. The next source might be the encyclopedias, particular attention being called to the differences in levels or of the depth of subject matter. Major periodical indexes might then be listed with suggested subjects under which to look. Above all, it is suggested that any difficulties can be resolved easily if the student seeks help from one of the professional librarians. Believing that knowledge of the librarian's name will encourage the student, this is always provided, along with information about his availability.

To support this concept of Orientation and Outreach, a grant was sought and received from the Council on Library Resources and the National Endowment for the Humanities. The grant for $50,000 over a five-year period stipulates a matching sum from the University.

Since the program began in September 1970, 196 individual faculty members have received personal visits from orientation librarians. Several meetings with groups of faculty have resulted from conferences with teaching department heads to have the program explained. Many more teachers are now consulting with librarians about assignments, eliciting their suggestions for new materials to be used. The number of invitations received for librarians to appear before classes has increased by approximately 200 percent. Twenty study guides have been prepared and distributed to almost 4,000 students, the majority of which were freshmen.

The total effect has been an increasing awareness by librarians of their professional responsibilities as opposed to the non-professional or busy work which often occupies too much of their time. Re-evaluations of daily responsibilities have brought increased demands for non-professional assistance. Teaching faculty are developing a new respect for the training and expertise of library faculty and are relying to a greater extent on the assistance they are prepared to give. It is believed that with the continuance of this program the standing of librarians within the educational framework will be enhanced and their role as educators will be more appreciated.

The ultimate beneficiaries are the students. Efforts are being made to identify those with problems so that librarians may demonstrate their concern and ability to provide guidance and assistance which hopefully result in better performance and the development of life-long, beneficial habits.

The undergraduate survey: Its role in changing patterns of reference service

by Connie F. Evrard and
Charles C. Waddington

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"As far as your library life is concerned, the Rock may never be the same again." This is the import of one poster at Brown University's Rockefeller Library and part of the publicity picture for the year-old Reference Fellow Project funded by the National Endowment for the Humanities and the Council on Library Resources. With four years of the program ahead, librarians and students are making discoveries that presage important changes in reference patterns there by 1975. A recent undergraduate survey is helping current analysis of the project, and it is the purpose of this paper to describe it and interpret some of its findings.[1] Before this can be done, it is essential to provide some background for the program.

Most universities and colleges work toward more frequent, skilled undergraduate use of their libraries by providing the most generous, efficient service they can afford. In an effort to accelerate in-depth use of its libraries by this segment of the community, Brown has designed a plan of bringing advanced graduate students, veterans of intensive summer training in reference work, into contact with the undergraduate library user. The graduate's combined knowledge of a particular subject and the techniques of research equip him to advise the younger student.

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In the summer of 1970, eight such "reference fellows" were instructed by professional staff within Brown libraries. With the advent of the academic year, they assumed posts at reference desks nine hours per week, spending an additional six in liaison work linking their particular departments with the library. Each produced a brief guide to the literature in his major field and these attractive booklets are free and readily available to all patrons.

Since awareness of such an innovation is basic to current and future use, the decision was made to survey the population toward which the project was aimed. The reference fellows and those directing the program wanted to know how well their publicity efforts had succeeded. Had the undergraduates and faculty read the two newsletters, seen the posters and flyers, or heard the announcements? Aside from providing information about knowledge of the reference fellows and actual use of their services, it was thought that this pilot survey would help identify certain characteristics of undergraduate library users and non-users. Armed with a better understanding of the current library habits of more than 4,000 students, planners could look ahead to better allocation of the fellows, changes in publicity techniques, or, perhaps, radical changes in the structure of the program.

As the simplest method of obtaining a random sample, the data processing department at Brown automatically selected the name of every fifteenth undergraduate and printed two address labels. To encourage wide response, questions were limited to seven and a simple checklist format was used. (See Appendix) No stamping or addressing was required of the respondents since intercampus mail was used. A week following the initial mailing in April 1971, a second mailing was sent to non-respondents. By May 1, a vigorous telephone campaign brought responses by 83 percent of the sample, a level assuring a high degree of confidence in the representative nature of the answers.

To determine the reliability of the sample to the universe of undergraduate students from which the sample was drawn, the percentages of students in each class of the respondents of the sample were compared to the percentages of students in each class of the undergraduates at Brown University. Tables I and II denote the percentages of each class in the sample and universe.

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TABLE 1

FREQUENCY OF UNDERGRADUATE STUDENTS IN BROWN UNIVERSITY BY CLASS[a]

Class	*Number of Students*	*Percentage*
Freshman	1113	27.55
Sophomore	998	24.72
Junior	915	22.65
Senior	1013	25.08
Total	4039	100.00

[a] Source: Computer file, Data Processing Division, Brown University

TABLE 2

FREQUENCY OF UNDERGRADUATE STUDENTS IN POLLED SAMPLE BY CLASS[b]

Class	*Number of Students*	*Percentage*
Freshman	58	25.77
Sophomore	65	28.88
Junior	55	24.44
Senior	47	20.88
Total	225	100.00

[b] Source: Poll of 6.6% random sample undergraduates, Brown University. Table represents the 83% which responded.

Chi square test yields a figure of 4.85 (3 D.F.) showing that the difference between sample and universe is not significant. Since separate

computer files are maintained for male and female students, percentages of each sex in the sample are identical to those in the universe.

In obtaining an overview of library use, it was found that 74 percent of the sample used the library at least once or more a week, the remaining 26 percent reporting less frequent use or no use at all. Twenty-eight percent of the polled students stated that they were there almost every day. No trend toward heavier use of the library with advanced years in college was discernible.[2] A specific definition of the term "use" was not made for the purposes of the poll and, therefore, it could range in meaning from "study hall use" to that including long term withdrawal of books and honors thesis research. A major purpose of this poll was to investigate those numbers who were directly exposed to more permanent forms of publicity about the program simply by entering the library.

Questioned about their use of the professional reference librarians, 29 percent of the students reported use of this staff three times or more, while 32 percent had never availed themselves of this service. More than 40 percent of the undergraduates requesting help of the reference librarians quite regularly were majoring in humanities; however, humanities was claimed as a major by only 32 percent of the respondents.

Publicity of one kind or another regarding the Reference Fellow Program reached 58.7 percent of the students, but although this fairly large number were aware of the fellows only 9 percent had consulted them. If this percentage is projected to encompass the entire Brown undergraduate community, we can state that the services of the reference fellows were used by about 360 individuals in the course of the academic year. Since this showing does not indicate that the program has had a major impact on students' library behavior in its initial year, it is appropriate to suggest a composite of reasons.

Publicity may have simply informed but failed to exert any impetus for action on the part of Brown students. It does take a certain amount of effort to inquire about the schedule of the particular reference fellow in one's field of interest and then arrange to confer with him. Tallies of conferences kept by the fellows all tended to show an increase in student visits as the months went by and, therefore, may indicate that a new program simply needs to gain momentum. All those who did use graduate student services were patrons of the library at least once a week and had consulted the professional reference librarians from time to time. Apparently, frequency of use of the

library encourages greater knowledge of its benefits, including innovative programs. One basic question is whether it is possible to bring the core of undergraduates with least frequent library use to a higher level by any library-initiated means.

It will be the task of the incoming group of reference fellows and those guiding them to reach the 1,640 students who are totally unaware of this specialized assistance and invite them to make a change in their academic life. Some less traditional forms of publicity may be necessary. The reference fellows themselves may need to seek out their clientele actively and informally. Next year's poll will make an interesting comparison with this one.

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1. Acknowledgement is made to Mrs. Elizabeth Schumann, Rockefeller Library Reference Department, for suggesting the poll.

2. This finding may be contrasted with that of Gorham Lane at the University of Delaware in a poll of library users taken in 1962. He found that seniors were the heaviest users, with decreasing use down to the freshman class. *Coll. & Res. Libs.*, July, 1966, p. 278.

APPENDIX

QUESTIONNAIRE

(1) My field of concentration is

humanities	[ ]
social science	[ ]
physical science	[ ]
biological science	[ ]

(2) I use the library

almost everyday	[ ]
once or more a week	[ ]
once or more a month	[ ]
almost never	[ ]

(3) I have asked the reference librarians for assistance

three times or more	[ ]
once or twice	[ ]
never	[ ]

(4) I have heard of the graduate reference fellow program
YES [ ] NO [ ]

(5) I have asked one of the eight reference fellows for assistance
more than once [ ]
once [ ]
never [ ]

(6) After graduation I intend to
attend graduate school [ ]
enter military service [ ]
begin a job [ ]
other [ ]

(7) Year in college

(8) Sex M [ ] F [ ]

NAME

Orienting the library to the user at hampshire college

by Robert S. Taylor

Hampshire College at Amherst, Massachusetts has received a matching grant from the National Endowment for the Humanities and the Council on Library Resources for a five-year program to develop methods of orienting the library to the user. The purpose of this program is to create an environment which encourages both a change in library style and priorities, and concomitantly, a change in the patterns of library use. To accomplish this objective, several interrelated activities are projected, all of which assume extensive student participation. They are:

1. investigation of what users do and do not do in libraries
2. a greatly expanded orientation program, designed for self-help by the user and utilizing all media as necessary
3. a program aimed at developing student reference assistants for service both in and outside the library.

We expect our activities to result in three "products":

1. a range of "software," specifically, video tape, film, slides, and in limited form, computer programs, in support of a wide range of user needs, usable in different libraries
2. an operating library in which an effort has been made to make it pervasive throughout the campus and which will serve as a model for other libraries
3. an informal clearinghouse for information on similar efforts.

BACKGROUND AND PHILOSOPHY OF HAMPSHIRE COLLEGE

Hampshire College is a new, independent, experimenting liberal arts college which opened for students in September 1970; it is intended specifically as a national pilot enterprise for innovations in American higher education. Hampshire was brought into being through the

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initiative of faculty and administrative leaders of four institutions in the Connecticut Valley of Massachusetts: Amherst, Mount Holyoke, and Smith Colleges, and the University of Massachusetts.

It is the result of planning begun in 1958, and its establishment was approved by the trustees of its four neighboring institutions.

Hampshire plans to have a student body of approximately 1,500 by the middle of the 1970's, and may expand in time to 3,600 students. The history and character of the early planning for Hampshire College are detailed in Working Paper Number One, *The Making of a College*, by Franklin Patterson and Charles R. Longsworth (Cambridge: The M.I.T. Press, 1966), and are brought up-to-date in the first Hampshire College catalog finished in the Spring of 1970. These volumes, which elaborate the intentions of Hampshire College, are not considered static blueprints, but a thorough approximation of all aspects of the College's planning.

Hampshire College is explicitly designed to serve as a source of innovation and demonstration for American undergraduate education. The implications of this fact are threefold. First, while determined to avoid the kind of "laboratory school" role which so often compromises the institution's primary responsibility for its own students, Hampshire intends to develop and conduct its programs with a careful eye to their transferability: many of the lessons learned should be applicable to other settings. Second, the College will develop new techniques for institutional self-evaluation, so that its experimenting character does not dissolve into just one more narrow, rigid "experimental" orthodoxy. Third, through a continuing series of conferences, consultations, and publications, Hampshire will solicit other relevant experience and make widely known the results and review of its own efforts. The subtitle of *The Making of a College*—Working Paper Number One—implies a series of monographs dealing with different and successive aspects of the College's life as it unfolds.

THE HAMPSHIRE COLLEGE LIBRARY CENTER

The challenge for the Hampshire College Library Center is the creation of a new institution merging the best of the traditional library with a readiness to make maximum use of innovation in communication technology. Changes in technology, in curricular design, in costs, in types of students, in the services demanded, and in the patterns of learning are happening so fast that a critical change in libraries is imperative.

Within this context of innovation and change, the Hampshire Library Center has been designed to be a demonstration model for college library development and operation in the last third of the twentieth century. In this role the Hampshire College Library Center will

1. combine book library, bookstore, computing center, display gallery, and the Information Transfer Center;
2. be the nerve center of the campus connecting the Library electronically with student rooms, faculty offices, classrooms, other libraries, and information processing networks;
3. contract for services, such as processing of materials, so that staff energies may be directed toward help to the user and total campus involvement; and
4. explore and develop an active role for the Library in the teaching and learning process.

In short, we are creating a dynamic and open-ended environment in the Library, from which the Hampshire student will develop a better sense of the organized complexity called communication. By becoming a more capable and sophisticated user of the new library, a student will possess the tools necessary to respond to two of the major challenges of this century: the information explosion and the revolution in communication technology.

Assumptions and Prejudices

The basic context of this program is to orient the academic library to the user, through better understanding and exploitation of the college environment in which the library exists and through the development of methods by which the library can respond better to the needs of that environment.

To accomplish our proposed objectives several interrelated activities are projected:

1. *research* on what users do and do not do in libraries;
2. a greatly expanded *orientation* program utilizing all media as necessary both in and outside the library;
3. a program aimed at developing *student reference assistants* for service in and outside the library.

In order to understand how we view these activities, it is worthwhile reviewing some of our assumptions concerning their context. We believe the library, as conventionally accepted and viewed, has a potential for education and learning that is largely unrealized. Unless a conscious attempt is made to meld the library with the totality of community

and institutional change, it will become an increasingly expensive and less effective appendage to the institution.

The image of the library as a single place or building on the campus must be changed. This implies that staff and, as we will propose, student assistants spend as much time outside the library as inside. Questions and problems, which could be assisted if not answered, do not suddenly come into existence when a user enters the front door of the library. They start in a classroom, a laboratory, a seminar, or most importantly, in that penumbral fringe of education, the bull session. The Library should be present in some personal form at the point where these questions originate, where the need for an answer arises.

In addition, we feel that much would be gained by making the library's publics part of the process of exploiting the unused potential. As a library serving a liberal arts college, students are our major public. It is critical that they may be made part of the process, rather than being merely supplants who come in the door. The idea of experimentation centered in the library offers an opportunity to study and to experiment with the processes of communication, learning, and personal growth that take place in the library.

Libraries are very frustrating systems to use. This occurs principally for several related reasons. The library contains highly structured packages, i.e., books, periodicals, etc., and its accessing systems are highly formalized. Yet the inquiries that come into the library are unstructured, i.e., loose, naive, ambiguous, because they are real questions from a real world, reflecting what Whitehead has called the "radically untidy, ill-adjusted character" of reality. Conventional library systems are of very little help here.

The systems, i.e., catalogs, indexes, classification schemes, form divisions, etc., are intended to help the user. For the naive user, however, they are terribly sophisticated and much too intricate awkward in fact. They have been designed by librarians for librarians. They are librarian's tools and seem to have little relevance for the user. Consequently, we believe that the system best able to display itself in a useful and functional way for the inquirer will be the most effective. One of the concerns of this program is to see if there are ways of improving the "merchandizing" of the content of the college library. What we are basically trying to do is create an environment an environment which encourages both a change in library style and concomitantly, a change in the patterns of library use. The work we propose is part of a long-range program to orient the library to the user, rather than insisting that the user adapt wholly to an "unnatural" system.

Program Activities

Explorations. As professional librarians we know very little about the interface between a user and whatever face the library turns toward him: catalog, index, reference librarian, rows of books or other media. We need to know more about the successes and the lack of success in libraries. We need to know what kinds of questions, however amorphous, students seek to answer. Out of what situations are they generated? We need to know the kinds of questions that are not asked of libraries. Why are they not asked of libraries? We need to know about the messages that move around a campus, and the possible roles of the library in such a network.

For this purpose we will develop a small core of students who are willing to observe themselves critically over a period of several years. Some of these students will work for the Library Center, some will not. We are concerned with two major facets here. First, how they as individuals attempt to answer questions of relevance to themselves. If they use the library, how they use it. Why they do not use the library in certain circumstances. What kinds of decisions do they make in accepting or discarding information. The second role of this small group is to become aware of and to describe some of the informal substantive information networks that exist on the campus and between the campus and the outside. Our goals here are (a) to begin to understand a little better what it is a library does do and what it could do, and (b) to create an environment, through student participation, which will enhance the library's effectiveness. The students in this group, though small in number, we see as a sort of leaven in the loaf.

Instruction and Orientation. We believe that present library instruction is sterile and self-defeating. The same holds true for the standard library handbook. They exist in a vacuum primarily because they bear no relation to any particular problem the student has. We are aware that this is probably true of a good deal of college instruction. But the lack of relevance forms a good part of present student dissatisfaction with higher education. The small step we propose here is directed toward meeting the user on his "turf" with some form of assistance at the time he has a problem, that is to make the library more relevant to him. This is a problem-oriented approach. Available tools—at least those that are economically feasible—are primitive. In this phase of the program we limit ourselves almost exclusively to those devices, displays, and systems that would be used within the library building. Over a period of several years, particularly when the communications system

for the college becomes reality, use of the programs would be available anywhere on the campus.

Our purpose here is principally to design, develop, and test small programs for orientation in whatever medium appears best adapted to the particular concern. Librarians have hardly begun to make effective use of simple print and graphic design to display to users the richness, organization, and usefulness of resources. In addition, video, film, and computer media offer a tremendous array of possibilities hardly touched for interactive systems at the user's level.

We foresee three general areas of concern:

1. We wish to develop at least one large multimedia presentation to introduce students to the problem of information overload in society and the present and potential roles the library can play. We would like a student to come out of such a presentation with a sense of the immensity of the information problems in our data-rich civilization and a question—what is the library?—which will lead him to explore and ask more questions.
2. We propose to develop media—both print and nonprint—presentations at points in the library where a student may have problems in using the indexes and catalogs. The key is that such presentations must be directed toward self-help, at the point where they would be useful to the user.
3. Video, film, and slide presentations will be developed to explore and to instruct in the information resources and systems in a single subject. Thus a student interested in child psychology, material science, architectural design, ecology, Caribbean studies, or the history of art could watch at his convenience—and repeat if he so desired—a video tape or film which illustrates the peculiarities of information and knowledge in that particular subject: the indexes, hand books, films, newsletters, the major centers or laboratories, and the informal communication structure of the subject. This would be a sort of brief sociology of the subject, illustrating various sources of information and their usefulness to particular problems. The library resources would be brought in where they are relevant and applicable.

Reference/Information Services. One of the major keys to orienting the library to the user are the reference and information services. In the conventional sense of a passive service which responds when asked, libraries, particularly special libraries, have performed this service well. However, we believe that the "respond-when-asked" approach is highly

restrictive and limits the full utilization of good librarians. We wish to suggest and to explore several alternatives.

First, as anyone who has served at a reference desk can verify, a fairly large proportion of the questions could be answered by a non-professional person. Such a person and we are suggesting students for this role would act as a sort of filter, answering questions where they had some competence, and a switching center, referring questions to others on the staff. The key condition, of course, is that that person know what he doesn't know, and that he have a flair and taste for interviewing.

We intend to make more intensive use of students in reference situations. This will take fairly comprehensive planning and training, but it will have several beneficial effects. We believe that students, especially the so-called non-user of libraries, will go to their peers to discuss their problems with more ease and rapport than they would with professional personnel. Imaginative use of student reference assistants will also allow the professional librarian more time to get out of the building and talk to students and faculty in their own environments. It will make the library and librarians more visible and hence, we believe, the library more effective.

A second approach is the training of a few students who will be reference advisers in the residence houses. Again our purpose is to make the library available and visible outside the physical building labelled "Library." Such students will serve a few hours per week at standard in-house reference service. Their principal responsibility, however, is to be known and available as reference assistants in the residence houses. We would back them up with announcements and "advertising," providing a status and reputation so that other students will recognize them as information resources and advisers. These student advisers would be thoroughly instructed in reference interviewing, in the sources and resources, and in the variety and forms of media available in the library. They may be given a very small set of reference materials and any other forms of support, e.g., films, subject guides, etc., we feel would help them.

CONCLUSION

There are many problems with such an approach. How to select such student advisers is the first one. What background and personal traits can be used to predict the responsible dedication and common-sense attitude necessary for such advising? How should they be trained? How

long will it take to train them? What format should be used to train them? How can the service be evaluated? How can we be assured that there will be some continuity of available service without restricting the student to specific hours and duties? However, we feel that this approach is terribly important in turning the library around so it faces the user. We cannot know if the potential we think exists here really has validity unless we try it. It is another attempt to break down the walls and make the library present in some form across the campus.

The above article is an excerpt from a book, *The Making of a Library*, by Robert Taylor, to be published by John Wiley & Sons, Inc., February 1972. Preprint © 1971.

The Wabash project: a critical program

by Charlotte Hickman Millis

The tripart library-centered project funded by the Council on Library Resources now in effect at Wabash College, an all-male liberal arts college in Crawfordsville, Indiana, is a circle of action within a circle of intent. It is not so innovative that its plan could not be adapted within any academic library serving undergraduates.

A core of action is provided in a series of freshman seminars. Each of these classes is seeded with an upperclass assistant, a model for students and an organizer for the faculty member in charge. An advanced student who has given evidence of some skill in his discipline and who knows how to prepare a research paper, the assistant has been further prepared for his seminar responsibilities by participating with his faculty member in a library workshop in the setting of the library—"where the books are." He works with his seminar leader on the concepts of the seminar and with the librarians on the process of gathering and assimilating information. During the course of the semester, he later experiences the library by manning the reference desk a minimum of three hours a week.

The intent is to develop library awareness within the instructional framework, and hopefully, to encourage more meaningful use for a constantly increasing number of students. It is expected that the increased action in the library will both be based on and result in a critical examination of the library's organization and operation, not only to ascertain the extent to which resources and services needed are available, but also to identify the areas which need strengthening if the library is to make to the process of education the overall contribution that can reasonably be expected of it.

This is a program with centrifugal force. At Wabash, as elsewhere, "the library's reaching out. . ."

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1. Patricia B. Knapp, *The Monteith College Library Experiment* (New York: Scarecrow Press, 1966).

THE NEED FOR COMMUNICATION

Listening is considered an important instrument for encouraging involvement at Wabash. Student assistants are encouraged to feed back feelings, observations, and suggestions both to project directors (the faculty coordinator, the librarian and the reference librarian) and to seminar faculty. Their ideas thus far are influencing decisions about the conceptualization of seminars, the format of bibliographic advice, a library handbook, reserve policies, circulation regulations, and hours the library is open.

At Wabash, the library and its possibilities intentionally are being examined thus, from the students' point of view, rather than with a fixation on "the system." Student involvement is seen as absolutely necessary to accomplish the aim of "changing our concept of the library from that of a storehouse of information (system-oriented) to that of a workshop (student-oriented) for the liberal arts," as stated in the proposal which in 1970 resulted in the five-year matching grant of $50,000 from the Council on Library Resources. Faculty and librarians at Wabash are encouraged to see that they have a common objective which serves to integrate their efforts: the more relevant education of students seeking autonomy in a troubled and rapidly-changing world, within a new and responsible-moral framework.

The need for a sensitive public relations program for the new concept of the library, to counteract latent anxieties and hostilities and to interpret thrust, is seen as a priority for the remaining four years of the Council-funded project—and from now on, for all libraries everywhere. Libraries aren't what they used to be, and librarians must be responsible for interpreting the changes.

BACKGROUND OF THE SEMINARS

The freshman seminars at Wabash were conceived to help the freshman move into the intellectual life of the college as quickly as possible, giving him the option of having at least one elective in a subject of his choice and in a small class permitting maximum interaction. When the program was approved, seminars were planned to begin in September, 1970, on subjects of the instructors' own choosing, not necessarily related to any departmental curriculum. First-year students had said they felt remote from their professors' chief concerns and professors had noted that they would like to demonstrate the nature and value of the liberal arts from the point of view of a well-defined topic which is of particular interest to them.

While the plan for these seminars germinated, the Faculty Library Committee was discussing methods of making the library more integral to the instructional program. For this purpose, the committee eventually approved a tie-in with the proposed seminars. Following an invitation from the Council on Library Resources for "a practical yet creative proposal" to achieve a more productive place for the library in the academic life of the college, this was the plan sent to the Council and soon approved by it. The seminars thus became the ground for a different kind of library orientation, one closely related to faculty appraisal of a felt need. This identification, it is believed, is extremely important for the success of the project.

In the fall semester of 1970–71, the following seminars were offered and staffed as noted:

The Art and Archaeology of Bronze Age Greece (Classics professor)
Censorship (Librarian and reference librarian)
Curriculum Building (Romance Languages professor)
Environmental Chemistry (three Chemistry professors)
Fascism as a Social Phenomenon (Economics professor)
Icarus: Exploration in Man's Mixed Nature (English professor)
The Literature of World War I (English professor)
The Origin of Life and Continental Drift (three Biology professors)
The Rise of the Adolescents, 1900–1945 (History professor)

IMPLEMENTATION OF THE SEMINARS

Implementing the Wabash project is a team of three. Coordinator is Richard Strawn, professor of Romance Languages, director of the Freshman Seminar Program, and former chairman of the Faculty Library Committee. Dr. Strawn, a Yale graduate, has long been interested in the correlation of library use and academic achievement. The library is represented by Donald E. Thompson, librarian, and Mrs. Charlotte Millis, a Sim[illegible]ns graduate who, with background in college public relations and publications and a commitment to the library-college philosophy, joined the staff of the Lilly Library in August 1970 as its first reference librarian.

Why were student assistants knitted into the plan for each freshman seminar? Integral to the library project is the thesis that a student will often consult another student for help before going to an adult. Accessibility is an important factor. For this role of consultant, professors selected articulate and promising upperclassmen. Assistants are often majors in the instructors' department, but this is not a requirement. "Walls" are not highly regarded in the Wabash project; "possibilities" are preferred.

BEST COPY AVAILABLE

Seminar assistants attend all seminar meetings, help the freshman understand the kind of back-up the library can provide in relation to his course needs, are available at many times and in many places around the campus for questions, and provide on-the-spot assistance in the library at a given time each week. It is interesting to note that professors of seminars other than those planned for freshmen increasingly are asking to have assistants involved in the library project, placing value on the library experience of such students and on their assistance in class.

A workshop is held for assistants and professors in the library before the beginning of each semester. Dr. Strawn and the librarians conduct it, with the following objectives: (1) communicating the place of the library in the intellectual development of the individual college students, (2) giving assistants experience in meeting research demands relevant to their seminars, and (3) providing an opportunity for the seminar instructor and his assistant to discuss the content and the goals of their seminars as well as to increase their awareness both of the possibilities of the library for meeting course objectives and of their responsibilities for helping to build a relevant collection.

As Patricia Knapp demonstrated at Monteith College, a single concept or "little problem" is selected by the faculty members from the fabric of each seminar to serve in the workshop as a library laboratory experiment (e.g., the reasons for the censorship of Cleland's *Fanny Hill* in the seminar on Censorship).[1] Students are shown how to gather and assimilate information, with emphasis later placed on learning how to proceed from mere collection of facts to the building of context and the construction of concepts.

EXPERIENTIAL APPROACH

Emphasis in the Wabash project is on "gates" because the whole span of research opens through about eight different families of resource materials—catalog, bibliography, encyclopedia, handbook, index, dictionary, abstract, book review source. After discussion and demonstrations of model "gates," students in the workshop branch out from cognitive to experiential learning situations—locating resources that they think will best supply the specialized needs for their "little problem." All exercises are related to actual course needs; because of this, personal motivation enters into the students' library experience.

No bibliographies are distributed in this workshop; the Wabash program does not encourage "canned" help but supports "discovery"—the formulation of individual search strategies which ask "which

index?" or "what catalog?" and "where can I go from here?" It can be noted that this reflects the overall philosophy of the project—its centrifugal thinking. It also makes the student a participant in the library, a producer in his own behalf—not a passive recipient of services who is deprived of the opportunity of learning "how" in the name of being helped.

Giving students the freedom to explore, and make fruitful mistakes is not easy for teachers. It is often painful and causes some anxieties. But in the library project it is an affirmation of belief in the ability of the upperclassman to find his way, to know when to consult the librarian, to enlarge his search techniques—to move from a pattern found helpful in finding facts, to one for building context, to one for understanding the message of a whole course—again, centrifugal action.

Dr. Strawn has written a programmed text on the use of the card catalog and seminar assistants have been given time to work through it to learn how to "play" the catalog effectively, to track down clues to research materials, and then to transfer their programmed experience to their own seminar research problem.

After they briefly describe the types and utilization patterns of the generic resources or "gates," the librarian and the reference librarian remain available through the workshop as media themselves, facilitators in the use of the resources of the library and interpreters of its possibilities. Their consistent approach is not to give answers but to ask questions, to motivate, and to encourage articulateness, free inquiry and development of independence.

The biggest wall to knock down in such a program is the one of the professor's or the librarian's authority. It is difficult for the specialist to stop being prescriptive; that is, it is difficult *until* he gains insight into what a step toward self-confidence and intellectual freedom his student has taken.

CENTRIFUGAL EFFECTS NOTED TO DATE

Several student assistants in the program have been vocal about their pleasure in having had this experience before going on to graduate school. One student assistant, who worked with a professor of English in the seminar on The Literature of World War I became interested in librarianship as a career. A February graduate, he has been hired as a full-time library intern at the college library, and has begun his graduate work in library science at Indiana University.

Through the increased emphasis on use, it has become evident that the library at Wabash has lagged in multimedia development, largely

because of staffing problems. In January 1971, the reference librarian was named chairman of the Faculty Library Committee subcommittee charged to recommend steps in multimedia development, working closely with five professors and one student member, all of whom asked to be on the committee. Their report, presented on April 6, 1971, will be the base for a phased thrust toward multimedia development which will include a library-based public relations program intended to increase multimedia awareness, a union list of all multimedia resources already in use on campus, consideration of incorporating audiovisual supported mini-courses into the curriculum, the increased use of the campus radio and closed-circuit television facilities and community cable TV as media for learning, a computer terminal within the library and, hopefully, an enabling grant to provide additional manpower.

The problem of control of government documents is presently being faced having been dramatized by seminars making extensive use of them. Wabash is a partial depository. The rate of collection of documents has far exceeded meaningful use. The collection will be weeded this summer, within government stipulations, and newly organized. It will then become more accessible through non-conventional indexing, if possible, and purposeful communication. When this problem has been contained, the library project will sponsor a practicum on the use of government documents, possibly utilizing programmed instruction.

Wabash students not associated with seminars have asked to be considered as student assistants because they consider the experience worthwhile. One wants the experience as a trial because he is thinking of becoming a reference librarian. Student assistants sharpen their bibliographic wits and extend reference services of the library into evening hours by being on duty, with pay, six nights each week, available to help freshmen in the seminars as well as other library patrons. This has become an "in" job on campus, not because of money because there are not enough hours involved, but because of benefits noted by the students involved. This is far removed from the old familiar resentment toward library orientation.

QUO VADIMUS?

Not tightly structured but philosophically grounded, the Wabash program, one-fifth of the way through its grant support, cannot be judged either a success or a failure. The already obvious acceleration of use has accentuated the need for more staff and dramatized the need

for efficiency and planning. Necessary staff development cannot be guaranteed through short-lived grant support and must become organically linked with the college's fiscal policy—a serious problem at a time when the college is reducing its commitments.

This makes most apparent the need for effective communication. The library first must come closer to living up to its potential. The library must analyze and reduce malfunctioning. Then, in every possible medium, the library must prove its value to the educational community. Otherwise, misunderstandings and hostilities will ensue if information specialists are added to the library ranks while faculty positions are being eliminated. Our libraries need to be seen as the media for learning they are, as extensions of the educational process.

The contemporary library has an unparalleled opportunity for creative encounter with the world—First, Second or Third. And we are learning that if all interests are to be served, we librarians and our students and helpers must go where the needs can be filled and not confine ourselves within library walls. As seen at Wabash (and elsewhere), the library has become an environment, a humanistic attitude, and is no longer a place. Teaching today's young people about the library has taught us that.

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APPENDIX

SUGGESTED READINGS TO ORIENT LIBRARIANS TO TODAY'S STUDENTS AND THEIR SEARCH FOR SELF IN A CONTEXT OF CHANGE AND ANOMALY

Axelrod, Joseph, and Mervin B. Freedman, general editors. *Search for Relevance: The Campus in Crisis.* San Francisco: Jossey-Bass, Inc., 1969.

Baskin, Samuel, editor. *Higher Education: Some Newer Developments.* New York: McGraw-Hill Book Co., 1965.

Bruner, Jerome S. *On Knowing: Essays for the Left Hand.* Cambridge: The Belknap Press of Harvard University Press, 1962.

———. *Toward a Theory of Instruction.* Cambridge: The Belknap Press of Harvard University Press, 1966.

——. *The Process of Education.* Cambridge: Harvard University Press, 1962.

Butz, Otto, editor. *To Make a Difference: A Student Look at America–Its Values, Its Society, Its Systems of Education.* N.Y.: Harper and Row, 1967.

Campus Unrest: Report of the President's Commission on Campus Unrest. Washington: Government Printing Office, 1970. Bibliography, pp. 267–69.

Chickering, Arthur. *Education and Identity.* San Francisco: Jossey-Bass, Inc., 1969.

Eurich, Alvin, editor. *Campus 1980: The Shape of the Future in American Higher Education.* New York: Delacorte Press, 1968.

——. *Reforming American Education: The Innovative Approach to Improving Our Schools and Colleges.* New York: Harper & Row, 1969. Bibliography, pp. 268–69.

Feldman, Kenneth, and Theodore Newcomb. *The Impact of College on Students.* Volume I. San Francisco: Jossey-Bass, Inc., 1969.

Flacks, Richard. "Social and Cultural Meanings of Student Revolt: Some Informal Comparative Observations." *Social Problems 7* (Winter 1970): 340–57.

Foley, James A., and Robert K. Foley. *The College Scene: Students Tell It Like It Is.* New York: Cowles Book, 1969.

Fuller, Buckminster. *Education Automation.* Carbondale, Ill.: Southern Illinois University Press, 1962.

Gerzon, Mark. *The Whole World Is Watching: A Young Man Looks at Youth's Dissent.* New York: Viking Press, 1969.

Goodman, Paul. *The Community of Scholars.* New York: Random House, 1962.

Hook, Sidney. *Academic Freedom and Academic Anarchy.* New York: Cowles Book, 1970.

Illich, Ivan. *Celebration of Awareness: A Call for Institutional Revolution.* Garden City, N.Y.: Doubleday, 1970.

Jencks, Christopher and David Riesman. *The Academic Revolution.* N.Y.: Doubleday and Co., 1968.

Keniston, Kenneth. *The Uncommitted: Alienated Youth in American Society.* New York: Harcourt, Brace and World, 1965.

———."What's Bugging the Students?" *Educational Record 51* (Spring 1970): 116–29.

Krishnamurti, J. *Education and the Significance of Life.* New York: Harper & Row, 1953.

Martin, Warren Bryan. *Conformity: Standards and Change in Higher Education.* San Francisco: Jossey-Bass, Inc., 1969.

Maslow, Abraham M., editor. *New Knowledge in Human Values.* New York: Harper & Brothers, 1959.

May, Rollo. *Man's Search for Himself.* New York: W.W. Norton and Co., 1953.

Meiklejohn, Alexander. *Education between Two Worlds.* New York: Atherton Press, 1966.

Nichols, David C., editor. *Perspectives on Campus Tensions.* Washington: American Council on Education, 1970.

"Rights and Responsibilities: The University's Dilemma." *Daedalus 99* (Summer 1970).

Rogers, Carl R. *Freedom to Learn.* Columbus, Ohio: Charles E. Merrill Publishing Co., 1969.

Reich, Charles A. *The Greening of America: How the Youth Revolution is Trying to Make America Livable.* New York: Random House, 1970.

Roszak, Theodore. *The Making of a Counter Culture.* Garden City, New York: Doubleday & Co., 1969.

Sampson, Edward E., editor. "Stirrings Out of Apathy: Student Activism and the Decade of Protest." *The Journal of Social Issues 23* (July, 1967).

Sanford, Nevitt. *Where Colleges Fail: A Study of the Student as a Person.* San Francisco: Jossey-Bass, 1967.

Student Use of Libraries: An Inquiry into the Needs of Students, Libraries and the Educational Process: Papers of the Conference within a Conference, the 1963 American Library Association Conference. Chicago: American Library Association, 1964.

Toffler, Alvin. "Education in the Future Tense." In *Future Shock.* New York: Random House, 1970, pp. 353–80.

Woodring, Paul. *The Higher Learning in America: A Reassessment.* New York: McGraw-Hill, 1968.

a program for action

by Mary E. Stillman

Although American librarians have staunchly supported the concept of the teaching function of academic libraries—and used this concept to justify demands for faculty status—teaching is unquestionably the least professionalized of library functions or services. Vast quantities of time, money, and discussion have been expended on collection development, organization of materials, and library technology, while the teaching function—at least, in its practical aspects—has been grossly neglected. Yet these very matters which occupied our resources have created monumental problems for both librarians and users; these problems can only be solved through the teaching function.

Added to the problems created by a surfeit of information and a multiplicity of bibliographic systems is the demand for individualized, relevant education. If educators heed these demands, the textbook and the static course will depart, and the pressure on librarians will be tremendous. Research on user needs conducted in the sixties confirmed what librarians have long suspected—that users do not use effectively existing resources. Although this research was primarily to obtain information for designing new systems, no radical change in basic information systems has resulted, and existing tools and systems, supplemented by more of the same, appear to be with us for many years to come. Meanwhile we must move to professionalize our instruction in the use of academic libraries.

WHY SO LITTLE HAS BEEN DONE

Since librarians are in agreement that instruction in the use of the library should be provided, why has so little been done? Perhaps we should examine briefly the historical, psychological and practical reasons for this failure.

The first academic librarians in America were, of course, faculty. With some notable exceptions, the librarian was often a misfit faculty member *unsuccessful* at teaching and with definite personality problems.

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From the beginning, this created an unfavorable image of the librarian in the minds of the faculty. When formal education for librarianship was established, there was a systematic effort on the part of the library profession to replace these faculty castoffs with "trained" librarians. Efforts to differentiate librarianship as a unique profession separate from teaching were so successful that they raised another barrier. While eliminating faculty as librarians, we also eliminated librarians from the faculty. To regain faculty status, it was necessary to establish a teaching role for librarians. Consequently, efforts to engage actively in teaching may be interpreted as a ploy to acquire or justify faculty status and be suspected and resented by faculty who are classroom teachers. This problem will remain with us for many years.

A reason often cited to justify lack of adequate library instruction is that librarians are not trained to teach. Although this is sometimes true, most faculty were not trained to teach either, but they have somehow managed. A more logical reason is that teaching the use of the library or providing library orientation has traditionally been an extra-duty task, shifted among the library staff with permanent responsibility unassigned. Since it is performed at the expense of the librarian's primary duty, it is not viewed enthusiastically by either the person assigned or the library administration.

Also by tradition, instruction has been unimaginative and rigidly structured into three basic forms—the walk-thru, point-out tour, either very superficial or horrendously detailed; hand-out brochures; and forced participation *via* English classes. Since compulsory, freshman English is merely tolerated by students, being introduced in this manner is not a psychological victory. In general, instruction has been done more from duty than enthusiasm; certainly there has been no status or prestige attached to it. In the last few years there has been an encouraging note in this area. A few, more progressive libraries have established a fulltime position of library instruction librarian with the sole function of developing and administering instructional programs. This select group has generated considerable information and activity and promoted a revival of interest in the subject.

Lack of high-level support was evident in the sixties. In a period when abundant funds were available for all manner of research and demonstration, with the exception of the Monteith project, there was no major research. The little that was done characterized the period which was technology and systems-oriented—it involved machine-assisted teaching. In short, it worked to reduce or eliminate contact between librarian and student! Fortunately, we appear to be entering an era

based more on humanism, and the current grants from the Council on Library Resources appear to reflect renewed interest in the problems of people, not machines.

PROGRAM FOR THE FUTURE

As the least professionalized of library services and functions, library instruction needs to acquire two of the attributes of professionalization–a body of knowledge based upon research and a systematic, formal education as preparation for pursuing it. Throughout this issue we have been offered practical suggestions and observations. These need to be tested to determine if they are correct. There is now sufficient observation to formulate hypotheses which can be tested, and assumptions can be replaced with knowledge. Research should concern itself with basic, not secondary, factors. For example, why concern ourselves with whether freshman orientation can be taught better by computer-assisted instruction, if we have not proven the necessity or advisability of freshman orientation. We should not allow our interest in educational technology to divert our attention from educational psychology and the basic learning process.

Concerning preparation for teaching library instruction, graduate schools can no longer avoid responsibility for graduating academic librarians adequately prepared to teach the use of the library. When faculty did not receive formal instruction in teaching, we could, perhaps, disregard this, but now even college faculty are learning to teach. If we can teach library students storytelling, we can surely prepare them to teach how to use the library without debasing graduate education. Is not the ability to explain and demonstrate successfully the acid test for proving proficiency? Instruction should be provided in a separate, full-scale course, and not be buried hit-or-miss in academic library service, bibliography, or research methods.

We must continue to have workshops, institutes and conferences to provide practicing librarians with the opportunity to learn and discuss problems and solutions. When possible, professionals expert in teaching methods and educational technology should be made available at these meetings. Clearinghouses are needed to facilitate the dissemination of information on operational programs and to distribute materials of general interest originating from workshops, conferences, etc.

Commercial publishers could be contacted and assisted in the development of attractive, well-designed multimedia instructional materials for commonly used tools, such as the standard indexes and

reference books. Perhaps the publishers of these works would provide these at nominal cost to promote the use of their products; they already do so, to a limited extent, as advertising literature. Professional literature should provide more detailed coverage of innovative programs; subsequently, they should solicit and publish impartial, critical evaluations of these same programs as a routine follow-up. It is especially important that we learn of failures and their causes. Presently, our aspirations are often chronicled as accomplishments and our disasters buried in silence.

Finally but most important, the Association of College and Research Libraries should take *aggressive* action to have adequate instruction in the use of libraries and library services accepted as a criterion for accreditation by regional accrediting associations. Until this becomes a standard, evaluated with other forms of *instruction*, the library will continue to be regarded by faculty and administrators as a support service, a resource, or part of the physical plant. Those who advocate the teaching role of the library must demonstrate conviction by insisting that this role be specifically evaluated independently of other aspects of library evaluation.

No time could be more propitious than the present—the need for instruction has become critical; students are insisting upon relevant education with individualized instruction; faculty are seriously interested in meeting these demands; and information and bibliographic tools are available in abundance. The real handicap of the movement for better instruction in use of the libraries is that there are no dramatic, revolutionary solutions. The Library-College movement has demonstrated convincingly that we cannot recast higher education in our own mold. We can, however, be alert to the problems and potential in our present education and systematically exploit every opportunity to move progressively toward the ultimate goal of integrating library instruction into the college curriculum.